

Poster Session I

Monday, September 17

Theater

Regular posters

P001 – P074, P130

P001 GOLD NANOPARTICLES@POLYDOPAMINE FILMS AS INNOVATIVE NANOMATERIALS FOR p-NITROPHENOL DETERMINATION IN URINE

A. Brittoli, E. Pascale, P. Palladino, S. Scarano*, and M. Minunni*

Department of Chemistry "Ugo Schiff", Alma Mater Studiorum - University of Florence, Via della Lastruccia, 3-13 - 50019 Sesto Fiorentino (FI), Italy

P002 SPUTTERING-ENABLED INTRACELLULAR X-RAY PHOTOELECTRON SPECTROSCOPY (SEI-XPS): A VERSATILE METHOD TO ANALYZE THE BIOLOGICAL FATE OF METAL NANOPARTICLES. INVESTIGATION OF AG AND PT CASES

Antonio Turco¹, S. Rella¹, M. Moglianetti², S. Corvaglia², T. Catelani³, R. Marotta³, P. P. Pompa⁴ and C. Malitesta¹

¹Laboratorio di Chimica Analitica, Dipartimento di Scienze e Tecnologie Biologiche e Ambientali (Di.S.Te.B.A.), Università del Salento, via Monteroni, – 73100 Lecce, Italy

²Istituto Italiano di Tecnologia, Nanobiointeractions&Nanodiagnostics, Center for Bio-Molecular Nanotechnologies, Via Barsanti – 73010 Arnesano (Lecce), Italy

³Istituto Italiano di Tecnologia, Electron microscopy laboratory, Nanochemistry department, Via Morego 30 – 16163 Genova, Italy

⁴Istituto Italiano di Tecnologia, Nanobiointeractions&Nanodiagnostics, Via Morego 30 – 16163 Genova, Italy

P003 GG-MH HNT HYBRID MULTIFUNCTIONAL MATERIALS FOR CARTILAGE REPAIR: DEVELOPMENT AND ANALYTICAL CHARACTERIZATION

M.A. Bonifacio¹, S. Cometa², A. Cochis³, P. Gentile⁴, A.M. Ferreira⁴, B. Azzimonti³, E.Ceci⁵, L. Rimondini³, E. De Giglio¹

¹Department of Chemistry, University of Bari "Aldo Moro", Via Orabona, 4- 70126 Bari, Italy

²Jaber Innovation s.r.l., Via Calcutta, 8 - 00144 Rome, Italy

³Department of Health Sciences, Università del Piemonte Orientale "UPO", via Solaroli, 17 - 28100 Novara, Italy

⁴School of Mechanical and Systems Engineering, Newcastle University, NE1 7RU, Newcastle upon Tyne, UK

⁵Department of Veterinary Medicine, University of Bari "Aldo Moro", S.P. per Casamassima - 70010 Valenzano, Italy

P005 ELECTRODEPOSITION OF METAL ALLOYS OF TECHNOLOGICAL AND INDUSTRIAL INTEREST

Massimo Innocenti^{1,2}, Maurizio Passaponti¹, Emanuele Salvietti¹, Riccardo Chelli¹, Antonio De Luca¹, Ferdinando Capolupo¹, Silvano Bellandi¹, Annalisa Guerri¹, Giorgio Federico Signorini¹, Marco Fontani¹, Luca Capaccioli³, Andrea Capaccioli³, Paolo Giusti⁴ and Andrea Caneschi⁵.

¹ University of Florence, Department of Chemistry, Via della Lastruccia 3, Sesto Fiorentino (FI) Italy and INSTM Consortium

² Institute of Chemistry of Organo-Metallic Compounds, ICCOM-CNR and INSTM Consortium, 50019 Sesto F.no, (FI), Italy

³ Italfimet s.r.l., via XXV Aprile 88, 52048 Monte San Savino (AR), Italy.

⁴ CDR s.r.l., Via degli Artigiani 6, 50055 – Ginestra Fiorentina, Firenze – Italy.

⁵ Dipartimento di Ingegneria Industriale, Via Santa Marta 3, 50139 (FI), Italy and INSTM Consortium, 50019 Sesto F.no, (FI), Italy

P006 SPECTROSCOPIC CHARACTERIZATION OF EXCEPTIONALLY STABLE SILVER NANOPARTICLES SYNTHESIZED BY LASER ABLATION IN ISOPROPYL ALCOHOL

M. C. Sportelli¹, M. Clemente¹, M. Izzi¹, A. Volpe², A. Ancona², G. Palazzo¹, N. Cioffi¹

¹*Dipartimento di Chimica, Università degli Studi di Bari "Aldo Moro", V. Orabona, 4, 70126, Bari, Italy;*

²*IFN-CNR, Physics Department "M. Merlin", Bari, Italy, via Amendola 173 – 70126 Bari, Italy*

P007 ELONA-BASED APPROACHES FOR THE ANTIBODY-FREE DETECTION OF TROPONIN T, THE KEY BIOMARKER OF ACUTE MYOCARDIAL INFARCTION

F. Torrini, A. Britto, P. Palladino, M. Minunni, S. Scarano*

Department of Chemistry "Ugo Schiff", University of Florence, Via della Lastruccia, 3-13, 50019 Sesto Fiorentino (FI), Italy

P008 EDX THICKNESS ANALYSIS OF METAL COATINGS USING MONTE CARLO STANDARDS

W. Giurlani¹, A. De Luca¹, F. Capolupo¹, A. Lavacchi², M. Innocenti^{1,2}

¹*Dipartimento di Chimica, Università degli Studi di Firenze, via della Lastruccia 3, 50019 Sesto Fiorentino (FI), Italy*

²*Consiglio Nazionale delle Ricerche - Istituto di Chimica dei Composti OrganoMetallici (CNR-ICCOM), via Madonna del Piano 10, 50019 Sesto Fiorentino (FI), Italy*

P009 PM EFFECTS ON METALLIC SURFACES: DEVELOPMENT OF A NEW ACCELERATED AGEING METHODOLOGY

I. Vettori¹, I. Vassura¹, E. Venturini¹, C. Chiavari², C. Martini³, F. Passarini¹, E. Bernardi¹

¹*Department of Industrial Chemistry "Toso Montanari", Alma Mater Studiorum - University of Bologna, Viale del Risorgimento, 4 - 40136 Bologna, Italy*

²*Department of Cultural Heritage, Alma Mater Studiorum - University of Bologna, Via degli Ariani, 1 - 48121 Ravenna, Italy*

³*Department of Industrial Engineering, Alma Mater Studiorum - University of Bologna, Viale del Risorgimento, 4 - 40136 Bologna, Italy*

P010 NIR SPECTROSCOPY, THERMOGRAVIMETRY AND CHEMOMETRICS TO DIFFERENTIATE BURNED AND UNBURNED ANCIENT HUMAN BONES

A. Biancolillo¹, S. Izzo¹, R. Bucci¹, F. Candilio², F. Marini¹, M. Tomassetti¹

¹*Chemistry Department, University of Rome La Sapienza, P.zza Aldo Moro 5, I-00185, Rome, Italy*

²*Environmental Biology Department, University of Rome La Sapienza, P.zza Aldo Moro 5, I-00185, Rome, Italy*

P011 Z POTENTIAL FOR THE EVALUATION OF THE WATER SENSITIVITY IN MODERN OIL PAINTINGS

F. Modugno, J. La Nasa, I. Bonaduce, S. Bianchi, V. Castelvetro

Department of Chemistry and Industrial Chemistry, University of Pisa (Italy)

P012 CHARACTERIZATION OF MATERIALS IN HISTORIC STRINGED MUSICAL INSTRUMENTS BY ANALYTICAL PYROLYSIS GC-MS WITH ON FIBER Silylation

L. Kasprzak¹, D. Fabbri¹, A. G. Rombolà¹, M. Malagodi², T. Rovetta²

¹*Department of Chemistry "Giacomo Ciamician", University of Bologna, Campus of Ravenna, Via S. Alberto 163, 48100 Ravenna, Italy*

²*Laboratorio Arvedi di analisi diagnostiche non invasive, Università degli Studi di Pavia, Museo del Violino, via Bell'Aspa 3, 26100 Cremona, Italy*

P013 DEVELOPMENT OF BIOACTIVE NANOCOMPOSITES FOR THE CONSERVATION OF MURAL PAINTINGS

I.D. van der Werf^{1,2}, D. Scardigno¹, L. Sabbatini^{1,2}

¹*Department of Chemistry, University of Bari Aldo Moro, Via Orabona, 4 - 70125 Bari, Italy*

²Interdepartmental Centre "Laboratorio di ricerca per la diagnostica dei Beni Culturali", University of Bari Aldo Moro, Bari, Italy

P014 CHARACTERIZATION OF ARABIC/CHRISTIAN MANUSCRIPTS USING A NON-INVASIVE APPROACH

M. Titubante¹, F. Giannini¹, L. Micheli¹, C. Mazzuca¹, M. Marinelli², A. Pasqualucci², M. Romani², G. Verona-Rinati², A. de Fouchier³, E. Proverbio³, A. Nuñez Gaitan³

¹Department of Chemical Sciences and Technologies, University of Rome "Tor Vergata", Via della Ricerca Scientifica 1, 00133 Rome, Italy

²INFN-Department of Industrial Engineering, University of Rome "Tor Vergata", Via del Politecnico 1, 00133 Rome, Italy

³Biblioteca Apostolica Vaticana, Cortile del Belvedere, Città del Vaticano, V-00120

P015 CHASING THE FUGITIVE – THE RED-COLOURED TEXTILES OF PHARAONIC EGYPT

M. Gulmini¹, P. Davit¹, M. Aceto^{2,3}, M. Borla⁵, V. Turina⁵, C. Oliva⁶, D. Tamburini⁷, J. Dyer⁷, M. Vandenbeusch⁸

¹Dipartimento di Chimica, Università degli Studi di Torino, Via Giuria, 7- 10125 Torino, Italy

²Dipartimento di Scienze e Innovazione Tecnologica, Università degli Studi del Piemonte Orientale "Amedeo Avogadro" viale T. Michel, 11 -15121 Alessandria, Italy

³Centro Interdisciplinare per lo Studio e la Conservazione dei Beni Culturali (CenISCo), via Manzoni, 8 - 13100 Vercelli, Italy

⁴Soprintendenza archeologia, belle arti e paesaggio della Città Metropolitana di Torino, Piazza S. Giovanni, 2- 10122 Torino, Italy

⁵Fondazione Museo Antichità Egizie, Via Accademia delle Scienze, 6 - 10123 Torino, Italy

⁶Oliva Restauri, Via Vanchiglia, 15 – 10124 Torino, Italy

⁷Department of Scientific Research, The British Museum, Great Russell Street, London WC1B 3DG, United Kingdom

⁸Department of Ancient Egypt and Sudan, The British Museum, Great Russell Street, London WC1B 3DG, United Kingdom

P016 TARGETED FORENSIC SCREENING AND SEMI-QUANTITATION OF DRUGS IN PLASMA USING HIGH-RESOLUTION ACCURATE-MASS DETECTION AND ONLINE SAMPLE PREPARATION

Claudio De Nardi¹, Valerie Thibert²

¹Thermo Fisher Scientific, Dreieich, Germany

²Thermo Fisher Scientific, Les Ulis, France

P017 PROPOSAL OF A COLOURIMETRIC TOOL FOR PROVIDING ACRYLAMIDE CONTENT IN FOOD PRODUCTS

A. Cavazza¹, C. Bignardi¹, D. Carà¹, M. Grimaldi¹, C. Manzi², M. Rinaldi³, C. Corradini¹

¹Department of Chemistry, Life Sciences, and Environmental Sustainability - University of Parma, Parco Area delle Scienze 17/A - 43124 Parma, Italy

²Cucina Evolution Academy, Viale Mentana 41, 43121 Parma, Italy

³Department of Food and Drugs - University of Parma, Parco Area delle Scienze 47/A - 43124 Parma, Italy

P018 TETRADESMUS OBLIQUUS MICROALGAE AS A SOURCE OF BIOACTIVE PEPTIDES: PURIFICATION AND IDENTIFICATION BY MULTIDIMENSIONAL LIQUID CHROMATOGRAPHY - MASS SPECTROMETRY

C. Cavaliere, M. Antonelli, G. La Barbera, C.M. Montone, S. Piovesana, A. Laganà

Department of Chemistry, University of Rome "La Sapienza", piazzale Aldo Moro, 5 – 00185 Rome, Italy

P019 TOWARDS A MISPE FOR ROXARSONE: MOLECULARLY IMPRINTED POLYMERS BASED ON TAILOR-MADE MONOMERS FOR THE RECOGNITION OF ORGANO-ARSENIC COMPOUNDS

G. Spano¹, C. Giovannoli¹, P. Manesiotis², S. Cavalera¹, F. Di Nardo¹, L. Anfossi¹, C. Baggiani¹

¹Department of Chemistry, University of Torino, Via Giuria 7 - 10125 Torino, Italy

²*School of Chemistry and Chemical Engineering, Queen's University, Belfast, United Kingdom*

P020 SYNTHESIS AND CHARACTERIZATION OF AN IRON (II) CITRATE NEUTRAL COMPLEX TO EVALUATE ITS USE AS A FOOD SUPPLEMENT TO OFFSET IRON DEFICIENCIES

D. Naviglio¹, M. Limatola¹, M. Ciaravolo¹, A. Andolfi¹, M. M. Salvatore¹, A. Elvetico¹, M. Gallo²

¹*Department of Chemical Sciences - University of Naples Federico II, Via Cintia, 4 - Monte S. Angelo Complex, 80126 Naples, Italy*

²*Dipartimento di Medicina Molecolare e Biotecnologie Mediche - University of Naples Federico II, via Pansini, 5, 80131 Naples, Italy*

P021 DISCRIMINATION OF OLIVE TREE VARIETIES INFECTED BY XYLELLA FASTIDIOSA USING VOLATILES BY HS-SPME-GC-MS COMBINED WITH MULTIVARIATE STATISTICAL ANALYSIS

A. Mentana¹, I. Camele², S. M. Mang², G. E. De Benedetto³, S. Frisullo¹, D. Centonze¹

¹*Dipartimento di Scienze Agrarie, degli Alimenti e dell'Ambiente, Università degli Studi di Foggia, Via Napoli, 25 - 71122 Foggia, Italy*

²*School of Agricultural, Forestry, Food and Environmental Sciences, University of Basilicata, Via dell'Ateneo Lucano, 10 - 85100 Potenza, Italy*

³*Dipartimento di Beni Culturali, Università del Salento, Centro Ecotekne Pal. M - S.P. 6, Lecce- Monteroni, Italy*

P022 SIMULTANEOUS DETERMINATION OF 12 RED DYES IN MEAT PRODUCTS BY A SIMPLE EXTRACTION FOLLOWED BY HPLC-UV-DIODE ARRAY DETECTION

A. Mentana², M. Iammarino¹, C. Palermo², M. Mangiacotti¹, A. E. Chiaravalle¹, D. Centonze²

¹*Istituto Zooprofilattico Sperimentale della Puglia e della Basilicata, Via Manfredonia 20, 71121, Foggia, Italy*

²*Department of the Sciences of Agriculture, Food and Environment, University of Foggia, Via Napoli, 25, 71122 Foggia, Italy*

P023 STUDY OF LANTHANIDES DISTRIBUTION PATTERN IN DIFFERENT SOIL MIXTURE

M. Barbera, F. Saiano

Department of Food Agriculture and Forest Sciences, University of Palermo, Viale delle Scienze ed.4, 90128 Palermo, Italy

P024 RARE EARTH ELEMENTS ANALYSIS FOR GARLIC ASSESSMENT: THE CASE STUDY OF RED VARIETY CULTIVATED IN ITALY

F. Saiano¹, M. Barbera¹, A.A. D'Archivio², M. Foschi², F. Ruggieri²

¹*Department of Food Agriculture and Forest Sciences, University of Palermo, Viale delle Scienze ed.4, 90128 Palermo, Italy;*

²*Dipartimento di Scienze Fisiche e Chimiche-Università degli Studi dell'Aquila, Via Vetoio Coppito-67100 L'Aquila, Italy*

P025 BIOACTIVE MOLECULES FROM TOMATO FRUITS AND BY-PRODUCTS

G. Tamasi^{1,2}, A. Pardini^{1,2}, C. Bonechi^{1,2}, A. Magnani^{1,2}, C. Rossi^{1,2,3}

¹*Department of Biotechnology, Chemistry and Pharmacy, University of Siena, I-53100 Siena, Italy*

²*Centre for Colloid and Surface Science (CSGI), University of Florence, I-50019 Sesto Fiorentino, Italy*

³*Operative Unit, University of Siena, Calabria, Italy*

P026 RELEASE OF HYDROCARBONS FROM FRESH CHEESE PACKAGING

D. Casaletti, G. Costamagna, L. Defereria, M. Ginepro

Department of Chemistry, University of Turin, Via Pietro Giuria 7- 10125 Turin, Italy

P027 BIOGENIC AMINES IN TYPICAL ITALIAN CHEESES AND CORRELATION OF THEIR CONTENT TO THE MAIN PROCESSING AND NUTRITIONAL CHARACTERISTICS

M. C. Bruzzoniti, Luca Rivoira, Michele Castiglioni

Department of Chemistry, University of Turin, Via P. Giuria 7, 10125 Turin, Italy

P028 ANALYSIS OF MILK AND NONDAIRY BEVERAGES: METHOD VALIDATION FOR DETERMINATION OF MERCURY BY HYDRIDE GENERATION ATOMIC FLUORESCENCE SPECTROSCOPY AND OF MAJOR AND TRACE ELEMENT BY INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY

M. L. Astolfi¹, C. Protano², E. Marconi¹

¹*Department of Chemistry "Cannizzaro", Sapienza - University of Rome, Piazzale Aldo Moro, 5 - 00185 Rome, Italy*

²*Department of Public Health and Infectious Diseases, Sapienza - University of Rome, Piazzale Aldo Moro, 5 - 00185 Rome, Italy*

P029 CORE-SHELL COLUMNS IN THE HPLC DETERMINATION OF ANTIBACTERIAL DRUGS IN FOOD AND FEED

S. Lo Magro¹, S. Summa¹, P. D'Antini¹, C. Palermo², M. Muscarella¹

¹*Istituto Zooprofilattico Sperimentale della Puglia e della Basilicata, Via Manfredonia 20, 71121, Foggia, Italy*

²*Dipartimento di Scienze Agrarie, degli Alimenti e dell'Ambiente, Università degli Studi di Foggia, Via Napoli 25, Foggia, Italy*

P030 A NEW RAPID AND GREENER METHOD FOR EXTRACTION OF CANNABINOIDS FROM FLOWERS OF *CANNABIS SATIVA*: COMPARISON BETWEEN THREE VARIETIES OF HEMP

M. Ciaravolo¹, D. Naviglio¹, A. Andolfi¹, M. DellaGreca¹, M.M. Salvatore¹, D. Baiano¹, M. Gallo²

¹*Department of Chemical Sciences - University of Naples Federico II, Via Cintia, 4 - Monte S. Angelo Complex, 80126 Naples, Italy*

²*Dipartimento di Medicina Molecolare e Biotecnologie Mediche - University of Naples Federico II, via Pansini, 5, 80131 Naples, Italy*

P033 NUTRACEUTICAL PROPERTIES OF EXTRAVIRGIN OLIVE OIL: OLEOCANTHAL CHARACTERIZATION BY LIQUID CHROMATOGRAPHY-ELECTROSPRAY IONIZATION FOURIER-TRANSFORM MASS SPECTROMETRY

R. Abbattista¹, I. Losito^{1,2}, C. De Ceglie¹, G. Basile¹, T.R.I. Cataldi^{1,2}, F. Palmisano^{1,2}

¹*Department of Chemistry and* ²*SMART Inter-department Research Center, University of Bari Aldo Moro, Via E. Orabona 4 - 70126 Bari, Italy*

P034 ANALYSIS OF VOLATILE ORGANIC COMPOUNDS OF HONEY PRODUCED IN TRIESTE KARST AREA BY HS-SPME-GC-MS, EVALUATION OF AN ELECTRONIC NOSE DISCRIMINATION POTENTIAL AND CORRELATION WITH VOCs PRODUCED BY LOCAL BEE HOST PLANTS

S. Licen¹, S. Cozzutto², C. Da Val¹, S. Gransinigh¹, P. Bianchini¹, P. Barbieri¹

¹*Department of Chemical and Pharmaceutical Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy*

²*ARCO SolutionS s.r.l., spin-off company of the Dept. of Chemical and Pharmaceutical Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy*

P035 MULTIDIMENSIONAL LIQUID-GAS CHROMATOGRAPHY COUPLED TO A SIMULTANEOUS ISOTOPE RATIO AND QUADRUPOLE MASS SPECTROMETRY FOR OLIVE OIL TRIGLYCERIDES ANALYSIS

D. Sciarrone¹, A. Schepis¹, L. Mondello^{1,2}

¹*Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche ed Ambientali, University of Messina, Polo Annunziata, Viale Annunziata s.n., 98168 Messina*

²*Chromaleont S.r.l., c/o University of Messina, Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche ed Ambientali, Polo Annunziata, Viale Annunziata s.n., 98168 Messina*

P036 AUTHENTICATION OF TRUFFLES AND PRODUCTS CONTAINING TRUFFLE BY MEANS OF MDGC-C-IRMS / qMS WITH A LOW-BLEED IONIC LIQUID SECONDARY COLUMN

D. Sciarrone¹, A. Schepis¹, L. Mondello^{1,2}

¹Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche ed Ambientali, University of Messina, Polo Annunziata, Viale Annunziata s.n., 98168 Messina

²Chromaleont S.r.l., c/o University of Messina, Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche ed Ambientali, Polo Annunziata, Viale Annunziata s.n., 98168 Messina

P037 AN ANALYTICAL STRATEGY FOR MALDI-MS-BASED UNTARGETED METABOLOMICS OF VITREOUS HUMOR TO ESTIMATE POST-MORTEM INTERVAL

D. Aiello¹, E. Furia¹, R. Rongo², C. Siciliano³, V. Fineschi⁴, A. Napoli¹

¹Department of Chemistry and Chemical Technologies “, University of Calabria, via P. Bucci, Arcavacata di Rende (CS), Italy

² DeMaCS & HPPC, University of Calabria, via P. Bucci, Arcavacata di Rende (CS), Italy

³Department of Pharmacy, Health and Nutritional Sciences, University of Calabria, Arcavacata di Rende (CS), Italy

⁴Department of Anatomical, Histological, Locomotor and Legal Medicine Sciences, University “La Sapienza”, Rome, Italy

P038 AN USER-FRIENDLY R SHINY APP FOR THE INTERPRETATION OF CHRONIC ALCOHOL ABUSE BIOMARKERS

G. Biosa¹, T. Neocleous², E. Alladio^{1,3}, A. Salomone³, M. Vincenti^{1,3}

¹Dipartimento di Chimica, Università degli Studi di Torino, Via P. Giuria, 7 - 10125 Torino, Italy

²Centro Regionale Antidoping e di Tossicologia “A. Bertinaria”, Regione Gonzole, 10/1 - 10043 Orbassano (Torino), Italy

³School of Mathematics and Statistics, University of Glasgow, University Place, Glasgow G12 8QQ, United Kingdom

P039 DEVELOPMENT OF A INNOVATIVE ANALYTICAL PROCEDURE FOR ORGANIC GUNSHOT RESIDUES (OGSR) INVESTIGATION

M. A. Fabiano¹, R. Risoluti¹, G. Gullifa¹, A. Gregori², S. Schiavone², S. Materazzi¹

¹Dipartimento di Chimica, “Sapienza” Università di Roma, P. le Aldo Moro 5, 00185 Roma

²Reparto Investigazioni Scientifiche RIS di Roma-Arma dei Carabinieri, Viale Tor di Quinto 151, 00191 Roma

P040 ELECTRODEPOSITED PRUSSIAN BLUE ON CARBON BLACK MODIFIED DISPOSABLE ELECTRODES FOR DIRECT ENZYME-FREE H₂O₂ SENSING IN A PARKINSON’S DISEASE IN VITRO MODEL

D. Rojas^{1,2}, F. Della Pelle¹, M. Del Carlo¹, D. Compagnone¹

¹Faculty of Bioscience and Technology for Food, Agriculture and Environment, University of Teramo, 64100, Teramo, Italy

²Department of Analytical Chemistry, Physical Chemistry and Chemical Engineering, Faculty of Biology, Environmental Sciences and Chemistry, University of Alcalá, E-28871 Alcalá de Henares, Madrid, Spain

P041 EFFECT OF MOBILE IONS IN THE ELECTRON TRANSFER PROCESS IN ENZYME- BASED AMPEROMETRIC SENSORS

D. Zappi¹, F. Battaglini²

¹Erasmus + ICM Ph.D. Student from Chemistry Dept. La Sapienza University of Rome p.le A. Moro, 5 00185 Rome Italy

²INQUIMAE – DQIAQF, FCEN, Universidad de Buenos Aires, Ciudad Universitaria – Pab. 2, 1428 Buenos Aires, Argentina

P042 SENSING PLATFORM APPLIED TO OLIVE OILS ANALYSES: SCREEN PRINTED ELECTRODES MODIFIED WITH NANOMATERIALS AND GREEN IONIC LIQUIDS

D. Zappi, C. Sadun, D. Dini, R. Caminiti, M. L. Antonelli

Chemistry Department La Sapienza University of Rome p.le A. Moro, 5 00185 Rome Italy

P043 ELECTROCHEMICAL PRINTED AND MINIATURISED SENSORS TO EVALUATE THE STATE OF CONSERVATION OF CONCRETE-BASED SAMPLES

A. Sassolini¹, I. Cacciotti², D. Moscone³, F. Arduini³

¹Arpa Lazio Via Salaria per L'Aquila, 02100 Rieti, Italy

²Department of Engineering, University of Rome Niccolò Cusano, Via Don Carlo Gnocchi 3, 00166 Rome, Italy

³Department of Chemical Science and Technologies, University of Rome Tor Vergata, Via della Ricerca Scientifica, 00133 Rome, Italy

P044 ELECTROCHEMICAL SENSOR FOR NADH DETECTION BASED ON ELECTROCHEMICALLY EXFOLIATED GRAPHENE OXIDE

F. Vulcano¹, F. Poletti¹, M. Melucci¹, C. Bettini¹, Z. Y. Xia¹, A. Kovtun¹, A. Liscio³, F. Terzi¹, M. A. Heras⁴, A. Colina⁴, V. Palermo¹, C. Zanardi^{1,2}

¹Istituto of Organic System and Photoreactivity (ISOF), Consiglio Nazionale della Ricerca (CNR), via Gobetti 101 - 40129 Bologna, Italia.

²Department of Chemical and Geological Sciences, Università di Modena e Reggio Emilia, Via G. Campi 103, 41125 Modena, Italia

³Istituto for Microelectronics and Macrosystems (IMM), Consiglio Nazionale della Ricerca (CNR), via del Fosso del Cavaliere 100 - 00133 Roma, Italia.

⁴Department of Chemistry, Universidad de Burgos, Pza. Misael Bañuelos s/n, E-09001 Burgos, Spain

P045 AMPEROMETRIC DETECTION OF HISTAMINE WITH A DIAMINE OXIDASE – POLY[(TAT)Ru(TpyCOOH)]²⁺- BASED SENSOR

F. Meloni, M. Pilo, G. Sanna, N. Spano, A. Zucca

Department of Chemistry and Pharmacy – University of Sassari, Via Vienna, 2 – 07100 Sassari, Italy

P046 CHARACTERIZATION AND APPLICATION OF ELECTROCHEMICAL SENSORS BASED ON CONDUCTING POLYMER NANOCOMPOSITES

G. Selvolini¹, G. Melinte^{1,2}, A. Adumitrachioaie^{1,2}, O. Hosu^{1,2}, C. Cristea², R. Săndulescu², G. Marrazza^{1,3}

¹Department of Chemistry "Ugo Schiff", University of Florence, Via della Lastruccia 3 - 50019 Sesto Fiorentino (FI), Italy

²Department of Analytical Chemistry, "Iuliu Hațieganu" University of Medicine and Pharmacy, 4 Pasteur Street - 400349 Cluj-Napoca, Romania

³Istituto Nazionale Biostrutture e Biosistemi – Consorzio Interuniversitario, Viale delle Medaglie d'Oro 305 - 00136 Rome, Italy

P047 A VERSATILE AND SENSITIVE VERSATILE POINT-OF-CARE TEST FOR THE RAPID DIAGNOSIS OF VISCERAL LEISHMANIASIS

L. Anfossi¹, F. Di Nardo¹, M. Profiti², C. Nogarol³, S. Cavalera¹, C. Baggiani¹, C. Giovannoli¹, G. Spano¹, E. Ferroglio², W. Mignone⁴, S. Rosati²

¹Department of Chemistry, University of Turin, Via P. Giuria, 5 – 10125 Torino, Italy

²Department of Veterinary Science, University of Turin, Largo Paolo Braccini, 2 - 10095 Grugliasco (TO), Italy

³In3diagnostic s.r.l., Via B.S. Valfrè, 18 - 10121 Torino, Italy

⁴Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle D'Aosta, sez. Imperia, Via Nizza, 4 - 18100 Imperia, Italy

P048 SCREEN PRINTED ELECTRODES MODIFIED WITH BIOCHAR: TOWARDS A NOVEL ELECTROCHEMICAL PLATFORM

R. Cancelliere¹, L. Micheli¹, K. Carbone², M. Pagano³

¹Dipartimento di Scienze e Tecnologie Chimiche, Università di Roma "Tor Vergata", Via della Ricerca Scientifica 1, 00133, Roma

¹Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria; Centro di ricerca Olivicoltura, Frutticoltura e Agrumicoltura, Via di Fioranello 52 – 00134 Roma

²Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria; Centro di ricerca Ingegneria e Trasformazioni Agroindustriali, Via della Pascolare 16 - 00015 Monterotondo (ROMA)

P049 DISPOSABLE PAPER-BASED SENSOR FOR RAPID FREE CHLORINE DETECTION

M. R. Tomei^{1,2}, L. Di Virgilio¹, D. Neagu², F. Arduini¹, D. Moscone¹

¹Department of Chemical Science and Technologies, University of Rome "Tor Vergata", Via della Ricerca Scientifica, 00173 Rome, Italy

²TecnoSens srl, Via Francesco Antolisei, 25 - 00133 Rome, Italy

P050 FLUORESCENT DNA-BASED IMMUNOASSAY FOR THE DETECTION OF SMALL MOLECULES

M. Rossetti¹, R. Ippodrino², B. Marini², G. Palleschi¹, A. Porchetta¹

¹Department of Chemical Sciences and Technologies, University of Rome Tor Vergata, Via della Ricerca Scientifica 1, 00133, Rome, Italy

²Ulisse BioMed S.r.l., Area Science Park, 34149 Trieste, Italy

P051 ANALYTICAL AND ENERGETIC APPLICATIONS USING A YEAST-DMFC DEVICE AND GLUCOSE AS FUEL

M. Tomassetti, E. Dell'Aglio, R. Angeloni, M. Castrucci, L. Campanella

Department of Chemistry, University of Rome "La Sapienza", P.le A. Moro, 5, 00185, Rome, Italy

P052 A COMPETITIVE AMPEROMETRIC MAGNETO-IMMUNOSENSING STRATEGY FOR HE4 OVARIAN CANCER BIOMARKER DETECTION

M. Mattarozzi, M. Giannetto, M. Careri

Department of Chemistry, Life Sciences and Environmental Sustainability - University of Parma, Parco Area delle Scienze, 17/A - 43124 Parma, Italy

P053 DEVELOPMENT OF AN ORIGAMI-LIKE REAGENT-FREE ELECTROCHEMICAL BIOSENSOR FOR ON-SITE DETECTION OF SULFUR MUSTARD

N. Colozza¹, K. Kehe², T. Popp³, D. Steinritz³, D. Moscone¹, F. Arduini¹

¹Department of Chemical Sciences and Technologies - University of Rome Tor Vergata, Via della Ricerca Scientifica, 00133 Rome, Italy

²Bundeswehr Medical Academy - Neuherbergstraße 11, 80937 Munich, Germany ³Bundeswehr Institute of Pharmacology and Toxicology - Neuherbergstraße 11 80937 Munich, Germany

P054 ALIZARINE RED S-BASE RECEPTOR FOR SIMULTANOUES DETERMINATION OF FE(III) AND AL(III)

L. R. Magnaghi, G. Alberti, R. Biesuz

Department of Chemistry, Università di Pavia, via Taramelli 12 27100 Pavia, Italy

P055 ENVIROMENTAL SENSOR FOR HEAVY METAL BASED ON ION IMPRINTED POLYMER

S. Di Masi¹, A. Garcia Cruz², S. A. Piletsky², C. Malitesta¹

¹Department of Science and Biological and Environmental Technology - University of Salento, Via Monteroni - 73100 Lecce, Italy

²Department of Chemistry - University of Leicester, University Road - LE1 7RH Leicster, UK

P056 STUDY OF PROCESS MARKERS DERIVING FROM DRYING TREATMENT OF PASTA USING A PEPTIDE BASED GAS SENSOR

S. Gaggiotti, B. Shkempi, G. Sacchetti, D. Compagnone

Faculty of Bioscience and Technology for Food, Agriculture, and Environment-University of Teramo, Via Renato Balzarini, 1 - 64100 Teramo, Italy

P057 A POCT FLUORESCENCE-BASED INTEGRATED PLATFORM AGAINST LIFE-THREATENING INFECTIONS

S. Tombelli¹, C. Trono¹, S. Berneschi¹, A. Giannetti¹, B. Adinolfi¹, R. Bernini², I.A. Grimaldi², G. Persichetti², G. Testa², G. Porro³, J. Eugen-Olsen⁴, F. Baldini¹

¹*Istituto di Fisica Applicata Nello Carrara, Sesto Fiorentino, Italy*

²*Istituto per il Rilevamento Elettromagnetico dell'Ambiente, Napoli, Italy*

³*Datamed srl, Peschiera Borromeo, Milan, Italy*

⁴*Virogates A/S, Birkerød, Denmark*

P058 IMMOBILIZATION OF CARBONIC ANHYDRASE ON AuNPs DEPOSITED ONTO SILANIZED GLASS SUBSTRATE FOR HEAVY METALS DETECTION

S. Rella¹, M.G. Manera², A. Colombelli², R. Rella², C. Malitesta¹

¹*Laboratory of Analytical Chemistry, Department of Biological and Environmental Sciences and Technologies, Di.S.Te.B.A., Università del Salento, via Monteroni, 73100 Lecce, Italy*

²*Institute CNR IMM - Lecce, via Arnesano 73100 Lecce, Italy*

P059 A NOVEL EASY TO USE AND PORTABLE DETECTION TOOL: A LAB-ON-A-TIP DEVICE FOR COPPER DETECTION

V. Mazzaracchio¹, S. Cinti¹, G. Öztürk², D. Moscone¹, F. Arduini¹

¹*Department of Chemical Sciences and Technologies, University of Rome "Tor Vergata", Via della Ricerca Scientifica 1, 00133, Rome, Italy.*

²*Department of Analytical Chemistry, Faculty of Pharmacy, Karadeniz Technical University, Trabzon, Turkey*

P060 NANOATRAZINE OPTICAL DETECTION FOR SMART AGRICULTURE

J. Vasiljević¹, A. Antonacci¹, L. F. Fraceto², E.V.R. Campos², V. Scognamiglio¹

¹*Institute of Crystallography, National Research Council, Department of Chemical Sciences and Materials Technologies, Via Salaria Km 29.3, 00015 Monterotondo Scalo, Rome, Italy*

²*Department of Environmental Engineering, São Paulo State University, Sorocaba, Brazil*

P061 HUMIC ACIDS PYROLYZED ONTO SILICA MICROPARTICLES FOR SPE OF BENZOTRIAZOLES AND BENZOTHIAZOLES FROM ENVIRONMENTAL WATERS

A. Speltini, M. Pastore, F. Merlo, F. Maraschi, M. Sturini, D. Dondi, A. Profumo

Department of Chemistry, University of Pavia, Via Taramelli, 12 – 27100 Pavia, Italy

P062 CHARACTERIZATION AND CHEMICAL PROFILING OF GREEN TEA SAMPLES USING CAPILLARY ELECTROPHORESIS COMBINED WITH CHEMOMETRICS

B. Pasquini¹, S. Orlandini¹, R. Gotti², M. Casale³, C. Caprini¹, E. Mustorgi³, M. Del Bubba¹, S. Furlanetto¹

¹*Department of Chemistry "U. Schiff", University of Florence, Via U. Schiff 6, Via della Lastruccia 3-13, 50019 Sesto Fiorentino, Florence, Italy*

²*Department of Pharmacy and Biotechnology, University of Bologna, Via Belmeloro 6, Bologna, Italy*

³*Department of Pharmacy, University of Genoa, Viale Cembrano, 4, 16148 Genoa, Italy*

P063 STUDY OF THE ADSORPTION EQUILIBRIA OF A PHARMACEUTICAL RELEVANT PEPTIDE IN RP-LC THROUGH ADVANCED NUMERICAL MEANS

C. De Luca¹, S. Felletti¹, M. Catani¹, W. Cabri², A. Ricci², A. Cavazzini¹

¹*Department of Chemistry and Pharmaceutical Sciences - University of Ferrara, Via L. Borsari, 46 - 44121 Ferrara, Italy*

²*Fresenius Kabi iPSUM s.r.l., via San Leonardo 23 - 45010 Villadose (Ro), Italy*

P064 COMPUTER-ASSISTED DEVELOPMENT OF RP-HPLC METHODS FOR THE ANALYSIS OF PLANT BIOACTIVE COMPOUNDS

D. Corradini, I. Nicoletti

Institute of Chemical Methodologies, National Research Council (CNR), Area della Ricerca di Roma 1, Via Salaria Km 29,300, 00015 Monterotondo Stazione (Rome), Italy

P065 EXTRACTION AND CLEAN-UP OF STEROID HORMONES FROM AQUEOUS PROTEIC MATRICES: A PRELIMINARY STUDY

F. Merlo, A. Speltini, F. Maraschi, M. Sturini, A. Profumo

Department of Chemistry, University of Pavia, via Taramelli 12, 27100 Pavia (Italy)

P066 DEVELOPMENT AND VALIDATION OF A MULTI-RESIDUE EXTRACTION METHOD FOR THE DETERMINATION OF ORGANIC MICROPOLLUTANTS IN SURFACE WATER

G. Vergine¹, C. Bargossi², L. Pasti¹, A. Cavazzini¹, I. Scaroni², E. Montanari²

¹*Department of Chemistry and Pharmaceutical Sciences - University of Ferrara, Via L. Borsari, 46 44121 FERRARA, Italy*

²*ARPAE Ravenna - Via G. Alberoni 17 - 48100 Ravenna*

P067 OPTIMIZATION AND VALIDATION OF A SPE-HPLC-PDA METHOD USING QUANTITATIVE STRUCTURE-RETENTION RELATIONSHIP BASED ON MAPPING THE HYDROPATHY FOR SIMULTANEOUS DETERMINATION OF DRUGS

G. Carlucci¹, P. Palumbo⁴, M. Carlucci⁵, E. Milanetti^{2,3}, P.P. Olimpieri², V. Ferrone¹

¹*Department of Pharmacy, ⁵Department of Medical, Oral and Biotechnological Sciences - University "G. d'Annunzio" Chieti-Pescara, Via dei Vestini, 31 -66100 Chieti, Italy*

²*Department of Physics - University "La Sapienza" Rome*

³*Center for Life Science@Sapienza, Italian Institute of Technology- Viale Regina Elena- Rome, Italy* ⁴*Department of Life, Health and Environmental Sciences- University of L'Aquila, via Vetoio -L'Aquila- Italy*

P068 IOHEXOL A NON-RADIOLABELED CONTRAST MEDIUM IN HUMAN PLASMA MEASURED BY ULTRA HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY (UHPLC) WITH DAD DETECTION

G. Carlucci¹, S. Bacchi⁴, M. Carlucci⁵, E. Milanetti^{2,3}, G. Palumbo⁴, V. Ferrone¹

¹*Department of Pharmacy, ⁵Department of Medical, Oral and Biotechnological Sciences - University "G. d'Annunzio" Chieti-Pescara, Via dei Vestini, 31 -66100 Chieti, Italy*

²*Department of Physics - University "La Sapienza" Rome, Center for Life Science@Sapienza, Italian Institute of Technology- Viale Regina Elena- Rome Italy*

⁴*Department of Life, Health and Environmental Sciences - University of L'Aquila- 67100 L'Aquila- Italy*

P069 SELECTIVITY OF SOLID PHASE MICROEXTRACTION FIBERS TOWARDS POLYCYCLIC AROMATIC HYDROCARBONS IN AIRBORNE PARTICULATE

M. Russo, F. Manarini, M.C. Pietrogrande

Department of Chemical and Pharmaceutical Sciences - University of Ferrara, Via Luigi Borsari, 46 - 44121 Ferrara, Italy

P070 NEW ASCORBIC ACID-BASED SPECTROPHOTOMETRIC METHOD FOR MEASUREMENT OF THE OXIDATIVE POTENTIAL OF ATMOSPHERIC AEROSOL

M. Russo, F. Manarini, M. Visentin, M.C. Pietrogrande

Department of Chemical and Pharmaceutical Sciences - University of Ferrara, Via Fossato di Mortara, 17/19 - 44121 Ferrara, Italy

P071 ZWITTERIONIC TEICOPLANIN CHIRAL STATIONARY PHASES ON 2.0 μ M AND 2.7 μ M SUPERFICIALLY POROUS PARTICLES: CHROMATOGRAPHIC EVALUATION AND COMPARISON WITH TEICOPLANIN ON 1.9 μ M FULLY POROUS PARTICLES

O. H. Ismail¹, M. Antonelli², A. Ciogli¹, C. Villani¹, A. Cavazzini², M. Catani², S. Felletti², D. S. Bell³, F. Gasparrini¹

¹Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza Università di Roma, P. le Aldo Moro 5, 00185 Rome, Italy;

²Dipartimento di Chimica, Sapienza Università di Roma, P.le Aldo Moro 5, 00185 Rome, Italy

³Dipartimento di Scienze Chimiche e Farmaceutiche, Università di Ferrara, via L. Borsari 46, 44121 Ferrara, Italy

⁴MilliporeSigma/Supelco, 595 North Harrison Road, Bellefonte, PA 16823

P072 DEVELOPMENT OF A MICROEXTRACTION BY PACKED SORBENT-PROGRAMMED TEMPERATURE VAPORIZATION-GAS CHROMATOGRAPHY-TRIPLE QUADRUPOLE MASS SPECTROMETRY METHOD FOR PHTHALATE MONOESTERS ASSAY IN HUMAN URINE

R. Elliani¹, A. Naccarato², A. Tagarelli¹

¹Department of Chemistry and Chemical Technologies - University of Calabria, Via P. Bucci Cubo 12/C, I-87030 Arcavacata di Rende, CS, Italy

²CNR - Institute of Atmospheric Pollution Research, Division of Rende, c/o UNICAL- Polifunzionale, I-87036 Arcavacata di Rende, CS, Italy

P073 NON-mAb PROTEIN PURIFICATION BY MEANS OF SPLIT-INTEIN MEDIATED AFFINITY CHROMATOGRAPHY

S. Felletti¹, N. Ulmer², O. Rammo³, M. Schulte³, A. Cavazzini¹, M. Morbidelli²

¹Department of Chemical and Pharmaceutical Sciences, University of Ferrara, via L. Borsari, 46 - 44121 Ferrara, Italy

²Institute for Chemical and Bioengineering, ETH Zürich, Vladimir-Prelog-Weg, 1/10 - 8093 Zürich, Switzerland

³Biopharm Process Solutions, Life Science, Merck KGaA, Frankfurter Strasse, 250 - 64293 Darmstadt, Germany

P074 ORTHOGONAL CHARACTERISATION OF NANOVESICLES THROUGH DIFFERENTIAL AND DENSITY GRADIENT CENTRIFUGATION HYPHENATED TO FLOW FIELD FLOW FRACTIONATION: DIFFERENCES IN SIZE, COMPOSITION AND RELATIVE ABUNDANCE OF DIFFERENT SPECIES IN EXOSOMAL SUBPOPULATIONS

V. Marassi¹, B. Roda¹, M. Guescini², S. Maggio², A. Zattoni¹, P. Reschiglian¹

¹Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy

²Department of Biomolecular Science, University of Urbino Carlo Bo, Urbino, Italy

P130 INSIGHT ON THE OCEAN-ATMOSPHERE INTERACTION IN POLAR SOUTHERN EMISPHERE BY LONG TERM AEROSOL MEASUREMENTS IN CENTRAL ANTARCTICA.

S. Becagli¹, R. Traversi¹, M. Severi¹, L. Caiazzo¹, L. Lazzara², C. Marchese³

¹Department of Chemistry "Ugo Schiff", University of Florence, via della Lastruccia, 3 -50019 Sesto F.no (FI), Italy

²Department of Biology, University of Florence, via Madonna del Piano, 6 -50019 Sesto F.no (FI), Italy

³Department de Biologie, Chimie et Geographie, Université du Quebec a Rimouski, 300 Rimouski, Québec, G5L 3A1, Canada

Flash communication posters

PF1 SB - PF4 SB, PF1 SS, PF1 FN, PF2 FN, PF1 EC - PF3 EC, PF1 AS, PF1 FO, PF1 MS

PF1 SB LIFE MARKER DETECTION IN PLANETARY EXPLORATION: A NOVEL BIOSENSOR FOR ATP DETECTION BASED ON CHEMILUMINESCENT DNA SWITCH INTEGRATED WITH AMORPHOUS SILICON PHOTODIODES

E. Marchegiani¹, M. Mirasoli¹, M. Zangheri¹, M. Guardigli¹, C. Caliceti¹, A. Porchetta², D. Caputo³, A. Nascetti⁴, A. Roda¹

¹Department of Chemistry, Alma Mater Studiorum, University of Bologna Via Selmi 2, 40126 Bologna, Italy,

²Department of Chemistry, Tor Vergata University of Rome, Via della Ricerca Scientifica 1, 00133 Rome, Italy

³ Department of Information, Electronics and Communication Engineering, Sapienza University of Rome, Via Eudossiana 18, 00184 Rome, Italy

⁴Aerospace Engineering School, Sapienza University of Rome, Via Salaria 851/881, 00138 Rome, Italy

PF2 SB A COMPETITIVE APTAMER ASSAY FOR GLUTEN DETECTION IN DEEP EUTECTIC SOLVENT

R. Svegli¹, N. Dossi¹, R. Toniolo¹, R. Miranda-Castro², N. de-los-Santos-Álvarez², M. J. Lobo-Castañón²

¹Department of Agrifood, Environmental and Animal Sciences, University of Udine, via Cotonificio 108, Udine, Italy

²Department of Química Física y Analítica, Universidad de Oviedo, Av. Julián Clavería 8, 33006, Oviedo, Spain

PF3 SB RATIONAL CONTROL OF THE ACTIVITY OF A CU²⁺-DEPENDENT DNAZYME BY RE-ENGINEERING PURELY ENTROPIC DISORDERED DOMAINS

S. Ranallo, D. Sorrentino, F. Ricci

Department of Chemistry, University of Rome Tor Vergata, Via della Ricerca Scientifica 1, 00133 Rome, Italy

PF4 SB DNA-BASED QUARTZ CRYSTAL MICROBALANCE ARRAY FOR THE IDENTIFICATION OF AROMA PATTERNS IN FOODS

S. Gaggiotti, F. Della Pelle, M. Mascini, V. Masciulli, D. Compagnone

Faculty of Bioscience and Technology for Food, Agriculture, and Environment -

University of Teramo, Via Renato Balzarini, 1 - 64100 Teramo, Italy

PF1 SS INVESTIGATION, ISOLATION AND CHARACTERISATION OF NEW PRIONOID PROTEIN AGGREGATES THROUGH HOLLOW FIBER FLOW FIELD FLOW FRACTIONATION AND MULTI ANGLE LIGHT SCATTERING: A TOOL TO FACILITATE THE COMPREHENSION OF INFECTIOUS PROCESSES

V. Marassi¹, B. Roda¹, F. Beretti², A. Zattoni¹, M. Portolani², P. Reschiglian¹

¹Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy

²Department of Laboratory Activities, and Morbid Anatomy, University of Modena and Reggio Emilia, 41125 Modena, Italy

PF1 FN EXTRACTION, ANALYSIS AND ANTIOXIDANT ACTIVITY EVALUATION OF PHENOLIC COMPOUNDS IN DIFFERENT ITALIAN EXTRA-VIRGIN OLIVE OILS

C. Fanali¹, S. Della Posta¹, A. Vilmercati¹, L. Dugo¹, M. Russo¹, T. Petitti¹, L. Mondello^{1,2,3}, L. De Gara¹

¹Unit of Food Science and Nutrition, Department of Medicine, Università Campus Bio-Medico di Roma, via Álvaro del Portillo 21, 00128 Rome, Italy

²Dipartimento di "Scienze Chimiche, Biologiche, Farmaceutiche ed Ambientali", University of Messina - Polo Annunziata, Viale Annunziata, 98168 Messina, Italy

³Chromaleont S.r.L., Viale Bocchetta 70, 98122 Messina, Italy

PF2 FN MULTIVARIATE OPTIMIZATION OF A QUECHERS PROCEDURE FOR THE LC-MS/MS ANALYSIS OF PHYTOESTROGENS IN SOY BURGERS

B. Benedetti, M. Di Carro, E. Magi

Department of Chemistry and Industrial Chemistry, University of Genova, Via Dodecaneso, 31 - 16146 Genova, Italy

PF1 EC INVESTIGATING PAINT MATERIALS IN STREET ART MURAL PAINTINGS BY ANALYTICAL PYROLYSIS BASED TECHNIQUES

J. La Nasa, S. di Carlo, I. Degano, M. P. Colombini, F. Modugno

Department of Chemistry and Industrial Chemistry, University of Pisa, via Moruzzi 13, 56124 Pisa, Italy

PF2 EC POTENTIALLY HARMFUL ELEMENT (PHE) OCCURRENCE AND PHASE PARTITIONING IN THE RIVER MOUTHS OF THE GULF OF TRIESTE (NORTHERN ADRIATIC SEA)

E. Pavoni^{1,2}, M. Crosera¹, E. Petranich², K. Klun³, J. Faganeli³, S. Covelli², G. Adami¹

¹*Department of Chemical & Pharmaceutical Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy*

²*Department of Mathematics & Geosciences, University of Trieste, Via E. Weiss 2, 34128 Trieste, Italy*

³*Marine Biological Station, National Institute of Biology, Fornace 41, 6330 Piran, Slovenia*

PF3 EC USE OF NANO-STRUCTURAL MATERIALS FOR ABATEMENT OF NITRATES IN NATURAL AND WASTE WATER

C. Cecone, G. Costamagna, M. Ginepro, S. Mariotti, J. A. Tafur Marinos, F. Trotta

Department of Chemistry University of Turin, Via Pietro Giuria 7, Torino - 10125, Italy

PF1 AS INSIGHTS INTO THE INHIBITION OF *P. FLUORESCENS* BIOFILM FORMATION VIA AFM AND ATR-IR CHARACTERIZATIONS

M. C. Sportelli¹, R. Quarto¹, R. A. Picca¹, C. Kranz², B. Mizaikoff², E. Tütüncü², A. Valentini³, N. Cioffi¹

¹*Dipartimento di Chimica, Università degli Studi di Bari "Aldo Moro", V. Orabona, 4, 70126, Bari, Italy;*

²*Institute of Analytical and Bioanalytical Chemistry, Ulm University, Albert Einstein Allee, 11, 89081, Ulm, Germany;*

³*Dipartimento di Fisica, Università degli Studi di Bari "Aldo Moro", V. Orabona, 4, 70126, Bari, Italy*

PF1 FO DETERMINATION OF ETHYL-GLUCURONIDE IN HAIR BY MEANS PLE-SPE EXTRACTION AND HPLC-MS/MS ANALYSIS

F. Vincenti¹, R. Di Mambro¹, R. Curini¹, M. Sergi², D. Compagnone²

¹*Department of Chemistry – Sapienza – University of Rome, Piazzale Aldo Moro, 5 – 00185 Rome, Italy*

²*Faculty of Bioscience and Technology for Food, Agriculture and Environment - University of Teramo, Via Balzarini, 1 - 64100 Teramo, Italy*

PF1 MS HPLC-ES MS/MS METHOD FOR THE IDENTIFICATION AND QUANTIFICATION IN HUMAN FECES OF GUT MICROBIOTA PRODUCTS: OXO-BILE ACIDS

E. Porru¹, P. Franco², J. Fiori¹, A. Gioiello⁴, B. Cerra⁴, G. Roda³, C. Caliceti^{1,2}, P. Simoni⁵, A. Roda^{1,2}

¹*Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy*

²*Centro Interdipartimentale di Ricerca Industriale Energia e Ambiente (CIRI EA), Alma Mater Studiorum - University of Bologna, Bologna, Italy*

³*IBD Center, Department of Gastroenterology, Humanitas Clinical and Research Institute, Rozzano, Milan, Italy*

⁴*Department of Pharmaceutical Sciences, University of Perugia, Via del Liceo 1, 06123 Perugia, Italy*

⁵*Department of Medical and Surgical Sciences, Alma Mater Studiorum – University of Bologna, Via Massarenti 9, 40138 Bologna, Italy*

Poster session II

Wednesday, September 19

Theater

Regular posters

P075 – P149, P004

P075 PHENOLS BIOCONVERSION BY IMMOBILIZED LACCASE IN A FLOW REACTOR

A. Apriceno, A.M. Girelli and L. Quattrocchi

Department of Chemistry, University of Rome "Sapienza", P.le A. Moro 5-00185 Rome, Italy

P076 MAKING ORDER OF DNA NANODEVICES THROUGH DISORDER

D. Mariottini¹, A. Idili¹, M. A.D. Nijenhuis², T. de Greef² and F. Ricci¹

¹*Chemistry Department, University of Rome, Tor Vergata, Via della Ricerca Scientifica, 00133, Rome, Italy*

²*Institute for Complex Molecular Systems, Eindhoven University of Technology, 5600 MB Eindhoven, The Netherlands*

P077 A COLORIMETRIC APPROACH TO EASILY MEASURE GOD ENZYME ACTIVITY

G. Volpe, S. Piermarini, D. Moscone, G. Palleschi

Department of Chemical Science and Technologies - University of Rome "Tor Vergata", Via della Ricerca Scientifica, 1 - 00133 Rome, Italy

P078 STRATEGIES TO IMPROVE THE SENSITIVITY OF AN ELIME ASSAY FOR THE DETECTION OF CAMPYLOBACTER

L. Fabiani¹, G. Volpe¹, E. Delibato², E. Pucci², S. Piermarini¹, G. Palleschi¹

¹*Department of Chemical Science and Technologies, University of Tor Vergata, Via della Ricerca scientifica 1 Roma.*

²*Department of Veterinary Public Health and Food Safety, Istituto Superiore di Sanità, viale Regina Elena 299, Rome*

P079 RULES TO PREPARE PEPTIDE-IMPRINTED NANOGELS WITH HIGH-AFFINITY BINDING SUITABLE FOR SENSING AND ASSAYS BY PRECIPITATION POLYMERIZATION

R. Tatti, A.M. Bossi

Department of Biotechnology - University of Verona, Strada Le Grazie, 15 - 37134 Verona, Italy

P080 QUANTITATIVE ANALYSES OF PROTEIN PROFILING TO STUDY THE DUAL PROTECTIVE/DAMAGING EFFECT OF 4-HYDROXYNONENAL (HNE) ON THE INTESTINAL BARRIER

A. Altomare, G. Mosconi, C. Guimarães Faria, G. Aldini, M. Carini, A. D'Amato

Department of Department of Pharmaceutical Sciences, Università degli Studi di Milano

Via L. Mangiagalli 25, 20133, Milano, Italy

P081 QUALITY BY DESIGN-DRIVEN OPTIMIZATION OF DRIED BLOOD SPOT EXTRACTION FOR A BIOANALYTICAL LC-MS METHOD

C. Caprini¹, G. Hopfgartner², L. Akbal², S. Orlandini¹, B. Pasquini¹, M. Del Bubba¹, S. Furlanetto¹

¹*Department of Chemistry "U. Schiff", University of Florence, Via U. Schiff 6, Via della Lastruccia 3-13, 50019 Sesto Fiorentino, Florence, Italy*

²*Department of Inorganic, Analytical, and Applied Chemistry, University of Genève, Pavillon Ansermet, 24 Quai Ernest Ansermet, CH-1211 Geneva 4, Switzerland*

P082 MULTI-OMICS PROFILING OF PANCREATIC CANCER STEM-LIKE CELLS

C. Di Carlo¹, M. Manfredi^{2,3}, J. Brandi¹, I. Dando⁴, E. Dalla Pozza⁴, A. Buzzi³, E. Marengo³, M. Palmieri⁴, D. Cecconi¹

¹*Department of Biotechnology, Proteomics and Mass Spectrometry Laboratory, University of Verona, Strada le Grazie 15 – 37135 Verona, Italy*

²*ISALIT, Spin-off of Department of Sciences and Technological Innovation, University of Eastern Piedmont, Alessandria, Italy.*

³*Department of Sciences and Technological Innovation, University of Eastern Piedmont, Alessandria, Italy.*

⁴*Department of Neuroscience, Biomedicine and Movement, University of Verona, Verona, Italy*

P083 TIME MONITORING OF ENDURANCE ATHLETES' URINARY STEROIDAL PROFILE

E. Amante^{1,2}, S. Pruner¹, R. Bro³, A. Salomone², M. Vincenti^{1,2}.

¹*Department of Chemistry, University of Torino, Via P. Giuria, 7 – 10125 Torino, Italy*

²*Centro Regionale Antidoping "A. Bertinaria", Regione Gonzole, 10/1 – 10043 Orbassano (To), Italy*

³*Department of food science, Faculty of Science, University of Copenhagen, Rolighedsvej 30 - 1958 Frederiksberg, Denmark*

P084 SILVER NANOPARTICLES: A POSSIBLE VERSATILE COLORIMETRIC LABEL IN LATERAL FLOW IMMUNOASSAY

F. Di Nardo, L. Anfossi, S. Cavalera, C. Giovannoli, G. Spano, C. Baggiani

Department of Chemistry - University of Torino, Via Pietro Giuria, 5 - 10125 Torino, Italy

P085 DETERMINATION OF PROSTAGLANDINE-LIKE MARKERS FOR OXIDATIVE STRESS IN HUMAN URINE BY SPE-UHPLC-MS/MS

F. Fanti¹, F. Vincenti², M. Serafini¹, A. Pepe¹, M. Sergi¹, D. Compagnone¹

¹*University of Teramo, Faculty of Bioscience and Technology for Food, Agriculture and Environment, 64100 Teramo, Italy*

²*Sapienza University of Rome, Department of Chemistry, 00185 Rome, Italy*

P086 NOVEL CARBON NITRIDE NANOPARTICLES AS CUSTOMIZABLE FLUORESCENT PROBES FOR IMMUNO-ANALYTICAL ASSAYS

G. Capilli, S. Cavalera, L. Anfossi, C. Giovannoli, M. Minella, C. Baggiani, C. Minero

Department of Chemistry - University of Torino, Via Giuria, 5 - 10125 Torino, Italy

P087 DEVELOPMENT OF AN ANALYTICAL STRATEGY FOR THE METAPROTEOMIC INVESTIGATION OF ATMOSPHERIC BIOAEROSOL

A. L. Capriotti, G. La Barbera

Department of Chemistry – La Sapienza, University of Rome, Piazzale Aldo Moro, 5 - 00185 Rome, Italy

P088 HIGH-THROUGHPUT SCREENING OF HEMOGLOBINOPATHIES

G. Gullifa¹, S. Materazzi¹, M. A. Fabiano¹, S. Massimi², P. Caprari², R. Risoluti¹

¹*Department of Chemistry, Sapienza - University of Rome, P.le A. Moro, 5 – 00185 Rome, Italy*

²*National Centre for the Control and Evaluation of Medicines - Istituto Superiore di Sanità, Viale Regina Elena, 299-00161 Rome, Italy*

P089 EVALUATION OF AN ELIME ASSAY TO REVEAL THE PRESENCE OF HEPATITIS A IN DRINKING WATER

C. D'Agostino¹, L. Micheli¹, A. Fasoli¹, E. Suffredini², D. Moscone¹,

¹*Department of Chemical Sciences and Technologies, University of Rome "Tor Vergata", Via della Ricerca Scientifica 1, 00133 Rome, Italy*

²Department of Food Safety, Nutrition and Veterinary Public Health, Istituto Superiore di Sanità, Viale Regina Elena 299, 00161 Rome, Italy

P090 PHARMACOKINETICS OF GEMCITABINE HYDROCHLORIDE AND IRINOTECAN HYDROCHLORIDE ALONE AND IN COMBINATION IN RAT PLASMA BY HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-DIODE ARRAY DETECTOR

D. Cosco¹, M. Locatelli², C. Celia^{2,3}, D. Paolino⁴, L. Di Marzio²

¹University of Catanzaro "Magna Graecia"; Inter-Regional Research Center for Food Safety & Health, Viale "S. Venuta"; 88100 Catanzaro; Italy;

²University of Chieti – Pescara "G. d'Annunzio"; Department of Pharmacy; via dei Vestini 31; 66100 Chieti; Italy;

³Houston Methodist Research Institute; Department of Nanomedicine; Houston; Texas 77030; USA;

⁴Department of Clinical and Experimental Medicine, University of Catanzaro "Magna Graecia", Viale "S. Venuta"; 88100 Catanzaro; Italy

P091 FPSE-HPLC-PDA METHOD FOR THE DETERMINATION OF INFLAMMATORY BOWEL DISEASE TREATMENT DRUGS IN WHOLE BLOOD, PLASMA AND URINE

A. Kabir¹, K. J. Furton¹, A. Tartaglia², S. Piccolantonio², E. Sperandio², F. Cacciagrano², N. Tinari³, L. Grossi⁴, M. Locatelli²

¹International Forensic Research Institute, Department of Chemistry and Biochemistry, Florida International University, Miami, FL, USA;

²University of Chieti – Pescara "G. d'Annunzio"; Department of Pharmacy; via dei Vestini 31; 66100 Chieti; Italy;

³University of Chieti–Pescara "G. d'Annunzio", Department of Medical, Oral and Biotechnological Sciences, Centro Scienze dell'Invecchiamento e Medicina Traslazionale - CeSI-MeT, Chieti, Italy;

⁴University of Chieti–Pescara "G. d'Annunzio", Department of Medical, Oral and Biotechnology Sciences, Chieti, Italy

P092 FAST METHOD FOR THE DETERMINATION OF MAJOR AND TRACE ELEMENTS IN BREAST MILK: OPTIMIZATION AND VALIDATION

M.L. Astolfi¹, E. Marconi¹, C. Protano², M. Vitali², S. Canepari¹

¹Department of Chemistry "Cannizzaro", Sapienza - University of Rome, Piazzale Aldo Moro, 5 - 00185 Rome, Italy

²Department of Public Health and Infectious Diseases, Sapienza - University of Rome, Piazzale Aldo Moro, 5 - 00185 Rome, Italy

P093 POLAR LIPID PROFILE OF SPIRULINA MICROALGA BY LIQUID CHROMATOGRAPHY COUPLED TO HIGH RESOLUTION MASS SPECTROMETRY

M. Antonelli, G. La Barbera, C.M. Montone, S. Piovesana, A. Laganà

Department of Chemistry, La Sapienza - University of Roma, Piazzale Aldo Moro, 5 - 00185 Roma, Italy

P094 AUTHENTICATION OF "NOCCIOLA ROMANA" PDO HAZELNUT BY NIR COUPLED WITH CHEMOMETRICS

A. Biancolillo^{1,2}, S. De Luca¹, S. Bassi¹, L. Roudier^{1,3}, R. Buccì¹, A. D. Magrì¹, F. Marini¹

¹University of Rome La Sapienza, Piazzale Aldo Moro 5, I-00185, Rome, Italy

²ITAP, Irstea, Montpellier SupAgro, Univ Montpellier, Montpellier, France

³Institut National des Sciences Appliquées, Campus de Rouen, Avenue de l'Université, Rouen, France

P095 DIRECT QUANTIFICATION OF CHEMICAL SPECIES BY MULTIVARIATE STANDARD ADDITION AND NET ANALYTE SIGNAL METHOD

A. Zappi, D. Melucci, F. de Laurentiis

Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy

P096 DETERMINATION OF PLANT-DERIVED CONTAMINANTS IN SAFFRON BY MEANS OF SPME-HS/GC-MS AROMA PROFILING COMBINED WITH CHEMOMETRICS

A.A. D'Archivio¹, F. Di Donato¹, M.A. Maggi², L. Rossi¹, F. Ruggieri¹

¹Dipartimento di Scienze Fisiche e Chimiche-Università degli Studi dell'Aquila, Via Vetoio Coppito-67100 L'Aquila, Italy

²Hortus Novus, Viale Aldo Moro, 28 D - 67100 L'Aquila, Italy

P097 GEOGRAPHICAL CLASSIFICATION OF SAFFRON (CROCUS SATIVUS L.) BY MEANS OF MULTIVARIATE STATISTICAL ANALYSIS OF UHPLC DATA

A.A. D'Archivio¹, M. Foschi¹, M.A. Maggi², F. Ruggieri¹

¹Dipartimento di Scienze Fisiche e Chimiche-Università degli Studi dell'Aquila, Via Vetoio Coppito-67100 L'Aquila, Italy

²Hortus Novus, Viale Aldo Moro, 28 D - 67100 L'Aquila, Italy

P098 DISCRIMINATION OF ARABICA AND ROBUSTA COFFEE SPECIES BY HS-SPME-GC-MS ANALYSIS OF VOLATILE ORGANIC COMPOUNDS OF GREEN BEANS AND A CHEMOMETRIC APPROACH

S. Licen¹, S. Cozzutto², M. Gasparini¹, L. Bertini¹, M. Crosera¹, G. Adami¹, P. Barbieri¹

¹Department of Chemical and Pharmaceutical Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy

²ARCO SolutionS s.r.l., spin-off company of the Dept. of Chemical and Pharmaceutical Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy

P099 IMAGE TEXTURE ANALYSIS ON HYPERSPECTRAL DATACUBES: A COMPARATIVE STUDY

E. Mustorgi, C. Malegori, P. Oliveri, M. Casale

DIFAR – Department of Pharmacy, University of Genova – viale Cembrano 4, 16148 Genova (GE), Italy

P100 FROM CHEMOMETRIC MODELS TO CHEMICAL INTERPRETATION: TOOLS AND CAVEAT

A. Biancolillo¹, F. Marini¹

¹Chemistry Department, University of Rome La Sapienza, P. le Aldo Moro 5, I-00185, Rome, Italy

P101 A SURVEY OF DATA FUSION APPROACHES IN CHEMOMETRICS CONTEXT

M. Cocchi¹, N. Cavallini^{1,2}, R. Ríos-Reina³, C. Durante⁴, M. Li Vigni⁴

¹Dipartimento di Scienze Chimiche e Geologiche, Università di Modena e Reggio Emilia, Via Campi 103, 41125 Modena, Italy

²Quality & Technology, Department of Food Science, University of Copenhagen, Rolighedsvej 26, 1958 Frederiksberg C, Denmark

³Dpto. de Nutrición y Bromatología, Toxicología y Medicina Legal, Facultad de Farmacia, Universidad de Sevilla, C/P. García González n°2, E-41012 Sevilla, Spain

⁴ChemSTAMP S.r.l., Spin Off UNIMORE, Via Campi 103, 41125 Modena, Italy

P102 EXPLOITING THE PERFORMANCE OF NEAR-INFRARED HYPERSPECTRAL IMAGING: TRANSFLECTANCE AND TRANSMISSION ANALYSES

P. Oliveri, C. Malegori

Department of Pharmacy (DIFAR), University of Genova, Viale Cembrano 4 – 16148 Genova, Italy

P103 ELECTROCHEMILUMINESCENT DNA SENSOR FOR THE DETECTION OF SPECIFIC DNA SEQUENCES

A. Zanut¹, A. Porchetta², M. Marcaccio¹, G. Valenti¹, F. Ricci², F. Paolucci¹

¹Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy

²Dipartimento di Scienze e Tecnologie Chimiche, University of Rome, Tor Vergata, Via della Ricerca Scientifica, 00133 Rome, Italy

P104 THALLIUM VOLTAMMETRIC DETERMINATION IN PRESENCE OF METAL INTERFERENCE IN FOOD AND BIO-MONITOR SPECIES:

APPLICATION TO MUSSELS, CLAMS AND OYSTERS

D. Melucci, F. De Laurentiis, A. Zappi, S. Casolari, C. Locatelli

Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy

P105 ELECTROCHEMICAL AND SPECTROSCOPIC INVESTIGATION ON THE STABILITY OF POLY ORTHO- AMINOPHENOL (PoAP), GROWN AS A VERY THIN MEMBRANE ON PLATINUM, UNDER PROLONGED IMMERSION IN WATER

G. Bianco, R. Ciriello, M. Contursi, D. Coviello, A. Guerrieri, F. Langerame, D. Montesano,

A. M. Salvi

Science Department DiS, University of Basilicata, Viale Ateneo Lucano, 10, 85100 Potenza, Italy

P107 3D FLOWER-LIKE PT NANOSTRUCTURES ON POLYPYRROLE NANOWIRE MATRIX FOR ENHANCED METHANOL OXIDATION

E. Mazzotta¹, A. Caroli¹, A. Pennetta², G.E. De Benedetto², E. Primiceri³, A.G. Monteduro^{3,4}, G. Maruccio^{3,4}, C. Malitesta¹

¹*Dipartimento di Scienze e Tecnologie Biologiche ed Ambientali, Università del Salento, Via Monteroni – 73100 Lecce, Italy*

²*Dipartimento di Beni Culturali, Università del Salento, Via D. Birago, 64, 73100 Lecce, Italy*

³*CNR NANOTEC – Institute of Nanotechnology c/o Campus Ecotekne, Via Monteroni, 73100 Lecce, Italy*

⁴*Dipartimento di Matematica e Fisica, Università del Salento, Via per Arnesano, 73100 Lecce, Italy*

P108 ELECTRODEPOSITION OF THIN FILMS FOR THE GALVANIC INDUSTRY

F. Gambinossi, W. Giurlani, E. Salvietti, M. Passaponti, M. Innocenti

Department of Chemistry - University of Florence, Via della Lastruccia, 3 - 50019 Sesto Fiorentino, Florence, Italy

P109 VOLTAMMETRY IN HYDROGEL FOR THE ANALYTICAL CHARACTERIZATION OF WATER SENSITIVE SURFACES

M. Donnici, M. Baldo, G. Bonazza, S. Daniele

Dipartimento di Scienze Molecolari e Nanosistemi, Università Cà Foscari Venezia, Via Torino, 155 – 30170 Venezia Mestre, Italy

P111 DETERMINATION OF PHARMACEUTICALS IN SURFACE WATERS BY AN ELECTRO-ACTIVATED GLASSY-CARBON ELECTRODE

S. Berto¹, L. Carena¹, F. Valmacco¹, C. Barolo^{1,2}, E. Conca¹, D. Vione¹, R. Buscaino¹, M. Fiorito³, C. Bussi³, O. Abollino¹, M. Malandrino¹

¹*Dept. of Chemistry, University of Turin, via P. Giuria 7, 10125 Turin, Italy*

²*INSTM and NIS Centre, University of Turin, via Quareello 15A, 10135 Turin, Italy*

³*Dept. of Nord-West Piedmont, Regional Agency for the Protection of the Environment - Arpa Piemonte, via Pio VII, 9 - 10135 Turin, Italy*

P112 DOPAMINE QUANTIFICATION IN RAT STRIATUM TISSUES TREATED WITH PERMETHRIN BY HPLC-ECD

M. Ricciutelli¹, M. Ciulla², L. Marinelli², G. Carlucci², V. Ferrone²

¹*School of Pharmacy, University of Camerino, Camerino, Italy*

²*Department of Pharmacy, University "G. d'Annunzio" Chieti-Pescara, Italy*

P113 CHARACTERIZATION OF DUSTY AND DUST FREE PM SAMPLES COLLECTED IN A SUBURBAN SITE IN SOUTHERN ITALY

A. Genga¹, S. Rella¹, M. Siciliano¹, T. Siciliano², D. Fico², G. De Benedetto², C. Malitesta¹

¹*Dipartimento di Scienze e Tecnologie Biologiche e Ambientali, Università del Salento, Lecce, 73100 Italy*

²*Dipartimento di Beni Culturali, Università del Salento, Università del Salento, Lecce, 73100, Italy*

P114 DETERMINATION OF POLYSTYRENE ACCUMULATION IN MUSSELS (*Mytilus galloprovincialis*) BY PYROLYSIS AND GC-MS

A.G. Rombolà¹, D. Fabbri¹, C. Torri¹, I. Vassura², S. Franzellitti³, E. Fabbri³

¹*Department of Chemistry "Giacomo Ciamician", University of Bologna, via S. Alberto 163, 48123 Ravenna, Italy*

²*Department of Industrial Chemistry "Toso Montanari", University of Bologna, Viale del Risorgimento 4, 40136 Bologna, Italy*

³*Animal and Environmental Physiology Laboratory, Department of Biological, Geological and Environmental Sciences, University of Bologna, via S. Alberto 163, I-48123, Ravenna, Italy*

P115 ASSESSMENT OF PARTICULATE MATTER DIMENSIONAL PROFILES AT AN INDUSTRIAL SITE BY MEANS OF SELF ORGANIZING MAP ALGORITHM APPLIED TO OPTICAL PARTICLE COUNTER DATA

S. Licen¹, S. Cozzutto², G. Barbieri², M. Crosera¹, G. Adami¹, P. Barbieri¹

¹*Department of Chemical and Pharmaceutical Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy*

²*ARCO SolutionS s.r.l., spin-off company of the Dept. of Chemical and Pharmaceutical Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy*

P116 IDENTIFICATION OF POLICYCLIC AROMATIC HYDROCARBONS IN POLYHYDROXYALKANOATE BIOPOLYMERS OBTAINED FROM URBAN SOLID WASTE BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY ANALYSIS

C. M. Montone, M. Antonelli, A. L. Capriotti, C. Cavaliere, A. Laganà

Department of Chemistry, University of Rome "La Sapienza", Piazzale Aldo Moro 5, Rome, Italy

P117 GAS AND AEROSOL COMPOSITION DURING THE AEROCLO-SA CAMPAIGN IN HENTIES BAY (NAMIBIA)

C. Giorio¹, J.-F. Doussin², M.D. Mallet², B. D'Anna³, A. Namwoonde⁴, P. Formenti²

¹*Dipartimento di Scienze Chimiche, Università degli Studi di Padova, Padova, Italy*

²*LISA UMR7583, CNRS, Université Paris-Est-Créteil (UPEC) and Université Paris Diderot (UPD), Institut Pierre Simon Laplace (IPSL), Créteil, France*

³*LCE, UMR7376, CNRS, Aix-Marseille University, France*

⁴*SANUMARC, University of Namibia at Henties Bay, Namibia*

P118 DETERMINATION OF CONTAMINANT SORPTION CAPABILITY OF BIOCHAR IN CULTIVATED SOILS: MODEL VS REAL SYSTEM APPROACH

E. Venturini¹, L. Tesaro¹, I. Vassura^{1,2}, D. Fabbri^{2,3}, C. Torri^{2,3}, F. Passarini¹

¹*Department of Industrial Chemistry "Toso Montanari", Alma Mater Studiorum - University of Bologna, Viale del Risorgimento, 4 - 40136 Bologna, Italy*

²*Interdepartmental Centre for Industry Research "Energy and Environment", Alma Mater Studiorum - University of Bologna, Via S. Alberto, 163- 48123 Ravenna, Italy*

³*Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy*

P119 THE HIDDEN MICROPLASTICS: SEPARATION AND CHARACTERIZATION OF MICROPLASTICS AND OF THEIR DEGRADATION BYPRODUCTS IN COASTAL SEDIMENTS

A. Ceccarini, A. Corti, F. Erba, F. Modugno, J. La Nasa, S. Bianchi, V. Castelvetro

Department of Chemistry and Industrial Chemistry, University of Pisa, via Moruzzi 13, 56124 Pisa, Italy

P120 ADSORPTION OF FLUORIDE ONTO TUFF VARIETIES OF THE NEAPOLITAN AREA

G. De Tommaso¹, V. Allocca², S. Coda², P. De Vita², M. Iuliano¹

¹Department of Chemical Sciences, University of Naples "Federico II" Via Cupa Nuova Cintia, 21-80126 Naples (Italy)

²Department of Earth, Environmental and Resources Sciences, University of Naples "Federico II" Via Cupa Nuova Cintia, 21 80126 Naples (Italy)

P121 USE OF ZEOLITES FOR THE ABATEMENT OF AMMONIUM INTO NATURAL WATER AND SAWAGE BREEDING

G. Costamagna, M. Ginepro, S. Mariotti

Department of Chemistry, University of Turin, Via Pietro Giuria 7 - 10125, Italy

P122 RELEASE AND SORPTION OF HEAVY METALS FROM BIOCHAR PRODUCED AT DIFFERENT TEMPERATURES

G. Costamagna, M. Ginepro, J.A. Tafur-Marinós, V. Zelano

Department of Chemistry - University of Turin, Via Giuria, 7 - 10125 Torino, Italy

P123 STRATIGRAPHIC DATING OF A 80 M DEEP FIRN CORE DRILLED IN COASTAL EAST ANTARCTIC ICE SHEET (EASTERN WILKES LAND)

L. Caiazzo, S. Becagli, R. Traversi, M. Severi, R. Nardin, G. Noferini

Dipartimento di Chimica (U. Schiff), Università di Firenze, via della Lastruccia 3 – 50019 Sesto Fiorentino, Firenze

P124 PAHs AND PCPs IN THE LOWER ADIGE RIVER: AN UNDEREVALUATED MATTER

M. Vecchiato¹, T. Bonato^{1,2}, A. Bertin², C. Barbante^{1,3}, R. Piazza^{1,3}.

¹Department of Environmental Sciences, Informatics and Statistics (DAIS), Ca' Foscari University of Venice, Via Torino 155, 30172 Venezia-Mestre, Venice, Italy

²Società Estense Servizi Ambientali (S.E.S.A. S.p.A.), Via Comuna 5/B, 35042 Este, PD, Italy

³Institute for the Dynamics of Environmental Processes (IDPA-CNR), Via Torino 155, 30172 Venezia-Mestre, Venice, Italy

P125 CHARACTERIZATION OF THE OXIDATIVE POTENTIAL OF WATER SOLUBLE FRACTION OF ATMOSPHERIC AEROSOL IN AN URBAN BACKGROUND SITE IN SOUTHERN ITALY

L. C. Giannossa¹, M. Giannuzzi², A. Mangone², D. Contini³, E. Merico³, A. Dinoi³, M.R. Guascito^{3,4}

¹Department of Economics, Management and Business Law - University of Bari Aldo Moro, Largo Abbazia Santa Scolastica, 53 - 70124 Bari, Italy

²Department of Chemistry - University of Bari Aldo Moro, Via Orabona, 4 – 70126 Bari, Italy

³Institute of Atmospheric Sciences and Climate - Italian National Research Council, Strada Provinciale Lecce-Monteroni km 1,2 - 73100 Lecce, Italy

⁴Department of Environmental and Biological Sciences and Technologies (DISTEBA) - University of Salento - 73100 Lecce, Italy

P126 VARIATION OF LEVELS OF FATTY ACIDS COMPOSITION IN THE LIVER OF ANTARCTIC FISH TREMATOMUS BERNACCHII IN FUNCTION OF TIME AND TEMPERATURE: A MODELLING APPROACH

M. Antonucci^{1,2}, I. Belghit², C. Truzzi¹, S. Illuminati¹, A. Annibaldi¹, G. Scarponi¹, Pedro Araujo²

¹Department of Life and Environmental Sciences, Università Politecnica delle Marche, Via Brecce Bianche, 60131 Ancona, Italy

²Institute of Marine Research (HI), PO Box 1870 Nordnes, N-5817 Bergen, Norway

P127 DETERMINATION OF KEY COMPOUNDS IN ANAEROBIC DIGESTION AND BIOMETHANE PRODUCTION: VOLATILE FATTY ACIDS AND METHYL SILOXANES

M. Ghidotti, C. Torri¹, D. Fabbri

Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy

P128 SYNCHRONIZATION OF FIVE ANTARCTIC ICE CORES ACROSS THE LAST ICE AGE

M. Severi, S. Becagli, L. Caiazza, R. Traversi

Department of Chemistry "Ugo Schiff", Università di Firenze, Via della Lastruccia, 3 - 50019 Sesto F.no, Italy

P129 DETERMINATION BY GC-MS/MS AND GCXGC-TOFMS TECHNIQUES OF PERSISTENT ORGANIC POLLUTANTS IN BIOTA: DEVELOPMENT AND VALIDATION OF A MODIFIED QUECHERS EXTRACTION

R. O. Bua¹, M. L. Antoci², D. Campo², A. Giuffrida¹

¹*Department of Chemical Sciences - University of Catania, Viale Andrea Doria, 6 - 95125 Catania, Italy*

²*Struttura Territoriale di Ragusa - Arpa Sicilia, Viale Sicilia, 7 - 97100 Ragusa, Italy*

P131 THERMODYNAMIC PROPERTIES OF LEVULINIC ACID, A SUSTAINABLE PLATFORM MOLECULE

G. Arena¹, C. Bretti², G.I. Grasso¹, G. Lando², S. Sammartano², C. Sgarlata¹

¹*Department of Chemical Sciences, University of Catania, Viale A. Doria, 6, 95125 Catania, Italy*

²*Department CHIBIOFARAM, University of Messina, Via F. S. D'Alcontres 31, 98166 Messina, Italy*

P132 As(III) INTERACTION WITH NITRILOTRIACETIC ACID DERIVATIVE COMPOUNDS IN AQUEOUS SOLUTION

D. Chillé, C. Foti, O. Giuffrè

Department of Chemical, Biological, Pharmaceutical and Environmental Sciences - University of Messina, V.le Ferdinando Stagno D'Alcontres, 31 - 98166 Messina, Italy

P133 METAL-BINDING ABILITY OF CALCITERMIN, AN ANTIMICROBIAL PEPTIDE OF HUMAN AIRWAYS

M. Toniolo,¹ M. Rowińska-Żyrek,² R. Guerrini,¹ D. Bellotti,¹ M. Remelli¹

¹*Department of Chemical and Pharmaceutical Sciences - University of Ferrara, Via L. Borsari 46 - 44121 Ferrara, Italy*

²*Faculty of Chemistry - University of Wrocław, F. Joliot-Curie 14, 50-383 Wrocław, Poland*

P134 STUDY ON THE INTERACTION OF Ca²⁺ WITH AMPICILLIN AND AMOXICILLIN IN AQUEOUS SOLUTION

S. Angowska¹, C. Foti², O. Giuffrè², S. Sammartano²

¹*Department of Pharmaceutical Chemistry, Poznań University of Medical Sciences, ul.*

Grunwaldzka 6, 60-780 Poznań, Poland

²*Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Viale F. Stagno d'Alcontres 31, 98166 Messina, Italy*

P135 ON METAL-LIGAND SYSTEMS AS CONTRAST AGENTS IN DIAGNOSTICS (MRI)

P. Scarano, C. Manfredi, A. Amoresano, M. Trifuoggi, G. Pinto, S. Volino

Department of Chemical Sciences, University of Naples Federico II, Via Cupa Nuova Cintia, 80126 Naples, Italy

P136 AUXINE: THERMODYNAMIC PROPERTIES, COMPLEXING ABILITY AND DOSAGE IN HUMAN SERUM

R.M. Cigala¹, V. Cernaro², F. Crea¹, M. Buemi², C. De Stefano¹, S. Sammartano¹

¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Viale F. Stagno d'Alcontres, 31, I-98166 Messina (Vill. S. Agata), Italy.

²Department of Clinical and Experimental Medicine, Chair of Nephrology, AOU Policlinico G. Martino, Messina, Italy

P137 LIPID PROFILING OF LUPINUS LUTEUS BY HYDROPHILIC INTERACTION LIQUID CHROMATOGRAPHY COUPLED TO ELECTROSPRAY IONIZATION AND MULTISTAGE MASS SPECTROMETRY (HILIC-ESI-MSn)

C.D. Calvano^{1,2}, Bianco M.¹, Damato P.¹, F. Palmisano^{1,2}, T.R.I. Cataldi^{1,2}

¹Dipartimento di Chimica and ²Centro Interdipartimentale di Ricerca SMART, Università di Bari Aldo Moro, via Orabona 4, 70126, Bari, Italy

P138 CHARACTERIZATION OF A SINGLE CYSTEIN-ENRICHED PHASEOLIN EXPRESSED IN TRANSPLASTOMIC TOBACCO PLANTS

A Zattoni¹, A Capecci², F De Marchis², M Bellucci², F Fallarino³, V Marassi¹, B Roda¹, A Pompa²

¹Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy

²Institute of Biosciences and Bioresources—Research Division of Perugia, National Research Council (CNR), via della Madonna Alta 130, 06128, Perugia, Italy

³Department of Experimental Medicine, University of Perugia, Via Gambuli 1, 06132, Perugia, Italy

P139 DESI-HRMS DETERMINATION OF NEW PSYCHOACTIVE SUBSTANCES IN ORAL FLUIDS BY USING NOVEL SAMPLING SUBSTRATES

F. Bianchi¹, S. Agazzi¹, N. Riboni^{1,2}, M. Hakkarainen³, L. Ilag², M. Careri¹

¹Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Parco Area delle Scienze, 17/A - 43124 Parma, Italy

²Department of Environmental Science and Analytical Chemistry, Stockholm University, 10691 Stockholm, Sweden

³Department of Fibre and Polymer Technology/Division of Polymer Technology, KTH Royal Institute of Technology, Teknikringen 58, SE-100 44 Stockholm, Sweden

P140 DETERMINATION OF POLYCHLORINATED DIBENZO-P-DIOXINS (PCDDs), POLYCHLORINATED DIBENZOFURANS (PCDFs) AND POLYCHLORINATED BIPHENYLS (PCBs) IN HENS EGGS

S. Lambiase^{1,2}, F. Fiorito¹, F.P. Serpe¹, P. Maglio¹, A. Scaramuzzo¹, M. Trifuoggi², M. Esposito¹

¹Department of Chemistry - Istituto Zooprofilattico Sperimentale del Mezzogiorno, via Salute 2, 80055 Portici (Naples), Italy

²Department of Chemical Sciences - University of Naples Federico II, Via Cinthia, 80126 Naples, Italy

P141 FIRST DETERMINATION OF CYLINDROSPERMOP SIN IN DRINKING WATER CHAIN OF VICO LAKE WITH SPE-LC-MS/MS

G. Di Pofi^{1,2}, G. Favero², F. Nigro di Gregorio¹, L. Lucentini¹, E. Veschetti¹

¹Department of Environment and Primary Prevention, Italian National Institute of Health, Viale Regina Elena 299, 00161 Roma, Italy

²Department of Chemistry and Drug Technologies, Sapienza University of Rome, P.le Aldo Moro 5, 00185 Rome, Italy

P142 SURFACE MODIFICATION OF CHITOSAN FILMS WITH FIBRONECTIN-DNA APTAMER COMPLEX TO ENHANCE OSTEOBLASTIC CELL ACTIVITY: A MASS SPECTROMETRY APPROACH TO PROVIDE EVIDENCE ON PROTEIN BEHAVIOR

M. Saccani¹, C. Bergonzi¹, A. Bianchera¹, C. Galli², L. Parisi², G. M. Macaluso², R. Bettini¹, L. Elviri¹

¹Department of Food and Drug Science, University of Parma, Parco Area delle Scienze 27/A, 43124, Parma, Italy

²Department of Biomedical, Biotechnological and Translational Sciences, University of Parma; Centro Universitario di Odontoiatria, Via Gramsci 14, 43126, University of Parma, Parma, Italy

P143 IMPLEMENTATION OF THE MODIFIED STANDARD ADDITIONS CALIBRATION METHOD FOR THE GC/MS QUANTIFICATION OF AMINO ACIDS

M. M. Salvatore, D. Naviglio, F. Salvatore, A. Andolfi

Department of Chemical Sciences, University of Naples 'Federico II', Naples 80126, Italy

P144 CONDENSED PHASE MEMBRANE INTRODUCTION MASS SPECTROMETRY COUPLED WITH LIQUID ELECTRON IONIZATION INTERFACE (CP-MIMS-LEI): A POWERFUL TOOL TO MONITOR ON-LINE CHEMICAL REACTIONS IN NON-ACQUEOUS SOLUTIONS

V. Termopoli¹, G. W. Vandergrift^{2,3}, M. Piergiovanni¹, E. Torrisi¹, G. Famiglini¹, P. Palma^{1, 2}, E. T. Krogh^{2, 3}, G. Zappia¹, A. Cappiello^{1,2}, C. G. Gill^{2,3, 4, 5}

¹*University of Urbino Carlo Bo, Urbino, Italy; 2Appl. Env. Res. Labs. (AERL), Nanaimo, BC*

³*Chemistry, University of Victoria, Victoria, BC*

⁴*Chemistry, Simon Fraser University, Burnaby, BC*

⁵*University of Washington, Seattle, WA*

P145 SPRINKLER IRRIGATION: A GOLDEN BULLET TO MINIMIZE THE BIOACCUMULATION IN RICE GRAIN OF THE MOST HEALTH-THREATENING ELEMENTS?

F. Barracu¹, M. Ciulu², M. Deroma¹, I. Langasco², M. I. Pilo², G. Sanna², N. Spano², A. Spanu¹

¹*Department of Agrarian - University of Sassari, Via E. De Nicola, 1 - 07100 Sassari, Italy*

²*Department of Chemistry and Pharmacy - University of Sassari, Via Vienna, 2 - 07100 Sassari, Italy*

P146 REAL-TIME MEASUREMENTS AND CHARACTERISATION OF ULTRAFINE AND SUBMICRON AIRBORNE PARTICLES NEAR AN INTEGRATED STEEL PLANT (TRIESTE-ITALY)

E. Baracchini¹, F. Larese², S. Licen¹, P. Barbieri¹, G. Adami¹, M. Crosera¹

¹*Department of Chemical & Pharmaceutical Sciences, University of Trieste, Via L. Giorgieri 1, 34127 Trieste, Italy*

²*Department of Medicine, Surgery and Health Sciences University of Trieste, Italy*

P147 A RARE CASE OF DRINKING WATER CONTAMINATION BY THALLIUM: PIPE MONITORING ALONG DISTRIBUTION NETWORKS IN PIETRASANTA (LU)

E. Veschetti¹, C. Sette^{1,2}, M. Le Donne^{1,2}, G. Favero², L. Lucentini¹

¹*Department Environmental and Health, Water Quality and Health Unit, Italian National Institute of Health, Viale Regina Elena, 299, 00161, Rome, Italy*

²*Department of Chemistry and Drug Technologies, Sapienza University of Rome, P.le A.Moro 5, 00185, Rome, Italy*

P148 PSEUDOMONAS REDUCTION IN DRINKING-WATER AND WASTEWATER DISTRIBUTION SYSTEMS BY CHLORINE DISINFECTION

G. Favero¹, L. Lucentini², E. Veschetti², L. Bonadonna², R. Paradiso²

¹*Department of Chemistry and Drug Technologies "La Sapienza" - University of Roma, Piazzale Aldo Moro,5 - 00161 Roma, Italy*

²*Department of Environment and Health - National Institute of Health, Viale Regina Elena, 299 - 00161 Roma, Italy*

P149 STUDY ON DISCOLORATION OF POLYVINYLCHLORIDE SHEET BY EVOLVED GAS ANALYSIS AND HEART CUTTING EGA-GC/MS ANALYSIS

M. Soll¹, A. Watanabe¹, I. Iwai², R. R. Freeman¹, N. Teramae³

¹*Frontier Laboratories Ltd., 4-16-20, Saikon, Koriyama, Fukushima 963-8862, Japan*

²*Diablo Analytical, Inc., 5141 Lone Tree Way, Antioch, CA 94531, USA*

³*Department of Chemistry, Graduate School of Science, Tohoku University, Aoba-ku, Sendai 980-8578, Japan*

P004 XPS STUDY OF REACTION CENTERS EMBEDDED IN POLYDOPAMINE THIN FILMS

M. R. Guascito¹, F. Milano², L. Giotta¹, M. Lo Presti³, A. De Bartolomeo⁴, S. Rella¹, D. Chirizzi⁵, G. M. Farinola³, M. Trotta²

¹Department of Biological and Environmental Sciences and Technologies, University of Salento, SP Lecce-Monteroni, 73100 Lecce, Italy

²CNR-IPCF Institute for Physical and Chemical Processes, Bari unit, Via Orabona 4, 70126 Bari, Italy

³Department of Chemistry, University of Bari, Via Orabona 4, 70126 Bari, Italy

⁴Department of Cultural Heritage, University of Salento, SP Lecce-Monteroni, 73100 Lecce, Italy

⁵Istituto Zooprofilattico Sperimentale di Puglia e Basilicata, Via Manfredonia 20, I-71121 Foggia, Italy

Flash communication posters

PF1 GC, PF1 EQ, PF2 EQ, PF1 CB, PF5 SB – PF7 SB, PF1 EL, PF2 EL, PF1 AB

PF1 GC CADMIUM UPTAKE AND DIFFUSION IN BIVALVE MOLLUSK SHELLS FROM AQUEOUS MATRICES – AN LA-ICP-MS LINE SCAN AND ELEMENT IMAGING STUDY

T. Chenet¹, G. Schwarz², M. Burger², B. Hattendorf², D. Günther², C. Stevanin¹, A. Cavazzini¹, L. Pasti¹

¹Department of Chemistry and Pharmaceutical Sciences, University of Ferrara, Via Borsari, 46 - 44121 Ferrara, Italy

²Laboratory of Inorganic Chemistry, ETH Zürich, Vladimir-Prelog-Weg, 1 - 8093 Zürich, Switzerland

PF1 EQ CALIXARENE-BASED SUPRAMPHIPHILES IN NEUTRAL BUFFERED SOLUTION: DETERMINATION OF CMC AND ΔH_{mic} BY A SINGLE EXPERIMENT

R. Migliore, C. Sgarlata, G. Arena

Department of Chemical Sciences, University of Catania, Viale Andrea Doria 6, 95125 Catania, Italy

PF2 EQ SPECIATION STUDY OF A BIS-(3-HYDROXY-4-PYRIDINONE) TOWARDS M^{2+}

P. Cardiano¹, K. Chand², R. M. Cigala¹, F. Crea¹, C. De Stefano¹, G. Gattuso¹, A. Irto¹, S. Sammartano¹, M. A. Santos²

¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences – University of Messina, Viale F. Stagno d'Alcontres, 31 – 98166 Messina, Italy

²Centro de Química Estrutural, Instituto Superior Técnico, University of Lisbon, Av. Rovisco Pais 1, 1049-001 Lisbon, Portugal

PF1 CB NEAR-INFRARED BASED DETECTION OF INSECTS INFESTATION IN RICE SAMPLES

A. Biancolillo, P. Firmani, R. Bucci, A. Magrì, F. Marini

Department of Chemistry “Stanislao Cannizzaro”, La Sapienza - University of Rome, P.le Aldo Moro, 5 – 00185 Rome, Italy

PF5 SB DEVELOPMENT OF A REFLECTANCE SMARTPHONE PAPER-BASED CHEMOSENSOR FOR THE EVALUATION OF ANTIOXIDANT ACTIVITY BY IN SITU GOLD-NANOPARTICLES SYNTHESIS

D. Calabria, C. Caliceti, M. Zangheri, E. Porru, M. Mirasoli, M. Guardigli, P. Simoni, A. Roda

Department of Chemistry “Giacomo Ciamician”, Alma Mater Studiorum - University of Bologna, Via Selmi 2 - 40126 Bologna, Italy

PF6 SB ENVIRONMENTAL AND OPERATIONAL STABILITY OF ORGANIC FIELD EFFECT TRANSISTORS FOR BIOSENSING APPLICATIONS

R.A. Picca¹, E. Macchia¹, K. Manoli¹, C. Di Franco², G. Palazzo¹, N. Cioffi¹, G. Scamarcio^{2,3}, L. Torsi¹

¹Dipartimento di Chimica - Università degli Studi di Bari “Aldo Moro”, Via E. Orabona, 4 - 70126 Bari, Italy

²CNR-IFN U.O.S. Bari, via Amendola 173 - 70126 Bari, Italy

³Dipartimento Interateneo di Fisica “M. Merlin” - Università degli Studi di Bari “Aldo Moro”, via Amendola 173 - 70126 Bari, Italy

PF7 SB POLYDOPAMINE: MOLECULAR IMPRINTING, PLASMONS AND CATALYSIS

P. Palladino, A. Brittolli, E. Pascale, S. Scarano, M. Minunni

Department of Chemistry "Ugo Schiff" - University of Florence, Via della Lastruccia, 3-13 - 50019 Sesto Fiorentino (FI), Italy

PF1 EL SINGLE CELL ELECTROCHEMILUMINESCENCE IMAGING: FROM THE PROOF-OF-CONCEPT TO DISPOSABLE DEVICE-BASED ANALYSIS

G. Valenti¹, S. Voci², A. Zanut¹, M. Zangheri¹, S. Scarabino², B. Goudeau², A. Lesch³, M. Jović³, M. Mirasoli¹, S. Rapino¹, S. Arbault², A. Roda¹, N. Sojic², F. Paolucci¹

¹*Department of Chemistry "Giacomo Ciamician", Alma Mater Studiorum - University of Bologna, Via Selmi, 2 - 40126 Bologna, Italy*

²*University of Bordeaux, Bordeaux INP, ISM, UMR CNRS 5255, 33607 Pessac, France.*

³*Laboratory of Physical and Analytical Electrochemistry, EPFL Valais Wallis, CH-1951 Sion, Switzerland*

PF2 EL OPTIMIZING THE ELECTRODEPOSITION PROTOCOL OF ENANTIOSELECTIVE INHERENTLY CHIRAL ELECTRODE SURFACES: A MULTI-TECHNIQUE INVESTIGATION

S. Arnaboldi¹, M. Magni¹, P. Mussini¹, T. Benincori², S. Cauteruccio¹

¹*Università degli Studi di Milano, Dipartimento di Chimica, Via Golgi 19, 20133, Milano, Italy*

²*Università degli Studi dell'Insubria, Dipartimento di Chimica, Via Valleggio 11, 22100, Como, Italy*

PF1 AB AN ANALYTICAL STUDY OF THE INFLUENCE OF CHITOSAN FEATURES ON THE CHEMICAL, PHYSICAL AND MECHANICAL AND IN-VITRO PROPERTIES OF 3D PRINTED SCAFFOLDS

C. Intini, C. Bergonzi, A. Bianchera, R. Bettini, L. Elviri

Department of Food and Drug Science, University of Parma, Parco Area delle Scienze 27/A, 43124, Parma, Italy