POSTER PRESENTATION LIST

PO01 Evaluation of illicit drug consumption in drunk drivers

Rosaria Ornella BUA - University of Catania

PO02 High-Resolution Accurate-Mass Orbitraptm[™] Mass Spectrometry: A Highly Specific and Sensitive Analytical Technique for Forensic Toxicology Case Solving

Giampietro FRISON - Laboratory of Clinical and Forensic Toxicology, DMPO Department, AULSS 3, Venezia Mestre

PO03 Determination of psychotropic and abuse substances: a new cooperation between University of Milano-Bicocca and Prefecture of Milano
Fabio GOSETTI - University of Milano-Bicocca

PO04 Fast LC-MS/MS confirmation assay for the determination of 17 drugs of abuse in oral fluid Marcello LOCATELLI - "G. d'Annunzio" University of Chieti-Pescara, Chieti

PO05 Validation of a bio-analytical method for the determination of New Psychoactive Substances in oral fluid samples by liquid chromatography coupled to mass spectrometry

Chiara MACCARI - University of Parma

PO06 3D Digital Microscope Hirox®-Use and importance of the digital microscope for preliminary inspections of plant matrices for forensic purposes

Ten Col. Pietro MAIDA and S. Ten. Valeria BUC-CILLI - Carabinieri Scientific Investigation Department (RaCIS), Messina

PO07 Mass spectrometry application on the detection of Sildenafil in aqueous phases

Madleine Adele PATERNOSTER

University of Basilicata, Potenza

PO08 Application of comprehensive GCxGC chromatography in the study of explosive devices.

Marco PAZZI - University of Turin

PO09 Fast LC-MS/MS screening method for the evaluation of drugs, illicit drugs, and other compounds in biological matrices

Enrica ROSATO – "G. d'Annunzio" University of Chieti-Pescara, Chieti

PO10 Fast LC-MS/MS method for the simultaneous determination of phytocannabinoids in oily based preparations

Fabio SAVINI - Pharmatoxicology Laboratory "Santo Spirito" Hospital, Pescara



FORENSIC INVESTIGATIONS AND THE CONTRIBUTION OF MASS SPECTROMETRY



MS Forensics 2022 3rd Edition





SCIENTIFIC PROGRAM

Rome, March 25th 2022 Scuola Superiore di Polizia - Aula VINCENZO PARISI - 8:00 - 8:30 Registration of participants

1st Session - Chairs: Prof. Manuel SERGI, C.C.T. Elena LUCATELLI

9:00-9:30 Greetings from authorities

9:30-9:35 Technical break and notice to participants

9:35-9:55 Strategies to reduce the spread of synthetic drugs and to promote the identification of new psychoactive substances.

Col. GdF Alessandro CAVALLI - Italian Central Directorate for Anti-drug Services (DCSA)

9:55-10:10 New drugs, borderline products, doping substances: chemical identification, data sharing- An overview of challenges and approaches from EU perspective Claude GUILLOU - Directorate General Joint

Claude GUILLOU - Directorate General Join Research Centre, Ispra (VA)

10:10-10:25 Knowledge without borders. Polizia di Stato and Science pursuing the Truth.

P.D.T. Antonietta LOMBARDOZZI - Central Anticrime Directorate of Italian National Police, Forensic Science Police Service, Rome

10:25-10:40 GHB/GBL analysis in different seized material: from kitchen laboratories to online selling. D.T.S. Serena DETTI – Central Anticrime Directorate of Italian National Police, Forensic Science Police Service, Rome

10:40-10:55 Applications of comprehensive two-dimensional GC to Fire investigation.

Marco PAZZI - University of Turin

10:55-11:00 Technical investigation in "hit and run" cases Lgt. Rosario CASAMASSIMA – Carabinieri Scientific Investigation Department (RaCIS), Rome

11:00-11:05 Untargeted Analysis By Mass Spectrometry: A Powerful Tool To Resolve A Case Of Wolf Poisoning.

Angela PEPE - Istituto Zooprofilattico Sperimentale del Mezzogiorno, Portici (NA)

11:05-11:10 The mystery of Erice. The discovery of an Isotta Fraschini type 8A engine

D.T.S. Carmelo CALZETTA - Regional Forensic Science Police Office, Palermo

11:10-11:40 Coffee Break

2rd Session - Chairs:

Prof. Donatella CARUSO - D.T.S. Carmelo CALZETTA

11:40-11-55 Forensic analysis using Head space/autoSPME/GCMS.

Rino CALORI – Agenzia Regionale per la Prevenzione, l'Ambiente e l'Energia Emilia Romagna, Bologna 11:55-12:10 pm The contribution of spectroscopic techniques and X-ray diffraction in the analysis of forensic traces. D.T.S. Damiano RICCI – Central Anticrime Directorate of Italian National Police, Forensic Science Police Service, Rome

12:10-12:25 pm Determination of cannabinoids in hair: indicators for illegal vs CBD-rich cannabis use.

Sara CASATI - University of Milan

12:25-12:40 pm OGSR and Oral Fluid: a new system to trace explosive in forensic analysis.

Ten. Col. Inv. Sc. Adolfo GREGORI - Carabinieri Scientific Investigation Department (RaCIS), Rome

12:40-12:55 pm NPS metabolite profiling with LC-HRMS/MS and software-assisted data mining - Jeremy CARLIER - Marche Polytechnic University, Ancona

12:55-1.10 pm The combined use of Solid Desorption GC-FTIR and LC-HRAM-Orbitrap-MS in forensic casework identification routine. *Tania Maria Grazia SALERNO - University of Messina*

1:10-2:40 pm Lunch

3rd Session - Chairs: Dr. Emanuela GREGORI-D.T.C. Sabino NAPOLETANO

2:40-2:55 pm Preparation of IEDs (Improvised Explosive Devices) with home made explosives in terrorist attacks starting from explosive precursors.

D.T.S. Maria Cristina PIGRO - Central Anticrime Directorate of Italian National Police, Forensic Science Police Service, Rome

2:55-3:10 pm Metabolomics studies of dental calculus from Alessandro Farnese, duke of Parma, and his wife duchess Maria D'Aviz by ultra high performance-liquid chromatography high resolution mass spectrometry.

Federica BIANCHI - University of Parma

3:10-3:25 pm Addressing the challenging task of bloodstain dating: the contribution of vibrational (MIR and NIR) and electronic (UV-Vis) spectroscopies.

Paolo OLIVERI - University of Genova

3:25-3:40 pm Fentanyl Derivatives and Synthetic Cathinones: Different analytical techniques for the characterization of NPS in seizure samples.

Magg. Inv. Sc. Fabiana DI ROSA - Carabinieri Scientific Investigation Department (RaCIS), Rome

3:40-3:55 pm Mobile mass spectrometry laboratory. Riccardo ADDOBBATI-LR.C.C.S. Burlo Garofolo, Trieste

3:55-4:00 pm Use of Immunochromatographic test (LFIA) for the rapid detection of Fentanyl in liquid and powder matrices. D.T.S. Marcello D'ELIA - Regional Forensic Science Police Office, Bologna

4:00-4:05 pm Comprehensive analytical and structural characteristics of BZO-4en-POXIZID.

Valentina GRECO - University of Catania

4:05-4:10 pm Bologna massacre: 39 years of shadow areas.

Ten. Col. Inv. Sc. Adolfo GREGORI - Carabinieri Scientific Investigation Department (RaCIS), Rome

4th Session - Chairs:

Prof. Fulvio MAGNI - D.T.S. Serena DETTI

4:15-4:30 pm Fast Quantitative LC-MS/MS Determination of Illicit substances in Solid and Liquid Unknown Seized Samples.

Angela TARTAGLIA - "G. d'Annunzio" University of Chieti-Pescara, Chieti

4:30-4:45 pm Evolution and investigation of the black market of new psychoactive drugs in Sicily.

Ten. Col. Pietro MAIDA - S. Ten. Valeria BUCCILLI - Carabinieri Scientific Investigation Department (RaCIS), Messina

4:45-5.00 pm UHPLC-HRMS-QTOF detection of psychoactive substances and synthetic opioids, including fentanyl, in Dried Blood Spots.

Alberto SALOMONE - University of Turin

5:00-5:05 pm Raman vs Revenge Porn

D.T.S. Gianluca TAREI - Central Anticrime Directorate of Italian National Police, Forensic Science Police Service, Rome

5:05-5:10 pm Micro-traces: more than "supporting evidence" - a case.

Cap. Inv. Sc. Livia LOMBARDI - Carabinieri Scientific Investigation Department (RaCIS), Rome

5:10-5:15 pm Stolen car used for a brutal robbery: enhancement of latent fingerprints.

C.C.T. Federica BARTOLI - Regional Forensic Science Police Office, Firenze

5:15-5:20 pm Py-GC-MS: a functional tool for forensic evidence-approach for explosive application.

S. Ten. Maria Aurora FABIANO - Carabinieri Scientific Investigation Department (RaCIS), Messina

5:20-5:25 pm Paint traces comparison in a fatal road accident.

C.C.T. Elena LUCATELLI - Central Anticrime Directorate of Italian National Police, Forensic Science Police Service, Rome

5:25-5:30 pm Closing remarks