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LE INDAGINI FORENSI ED IL CONTRIBUTO DELLA SPETTROMETRIA DI MASSA

FORENSIC INVESTIGATIONS AND THE CONTRIBUTION OF MASS SPECTROMETRY



STAMPA A CURA DELLA TIPOGRAFIA DELLA DIREZIONE CENTRALE DELLA POLIZIA CRIMINALE

Roma, 1 marzo 2019
Via Tuscolana, 1548



8.30 - Registration of participants

Session 1, chairs: D.T.S. Serena DETTI, Manuel SERGI

Greetings from Authorities

- 9.20 – 9.30 **Vittorio RIZZI** – *The Head of Central Anticrime Directorate*
- 9.30 – 9.40 **Fausto LAMPARELLI** – *The Head of Forensic Science Police Service*
- 9.40 – 9.45 **Donatella CARUSO** – *President of Mass Spectrometry Division of SCI*
- 9.45 – 9.50 **Claudio MINERO** – *President of Analytical Chemistry Division of SCI*
- 9.50 – 10.20 **The role of the forensic analytical chemist from an academic perspective: the case of molecular fingerprinting**
Simona FRANCESE – *Biomolecular Science Research Centre, Sheffield, UK*
- 10.20 – 10.40 **From the collection of evidences on the crime scene to the analysis: identification of benzodiazepines in drug-facilitated crimes**
D.T.S. Anna Maria CAPUTO
Central Anticrime Directorate of Italian National Police, Forensic Science Police Service (DAC-SPS), Rome
- 10.40 – 11.00 **Detection of fentanyl analogues and synthetic opioids in real hair samples. A picture of the U.S. emergency**
Marco VINCENTI – *University of Torino*
- 11.00 – 11.05 **Illicit administration of estradiol in cattle: case report**
Marilena GILI – *IZS del Piemonte, Liguria e Valle d'Aosta, Torino*
- 11.05 – 11.10 **Use of SPME coupled with Mass Spectrometry to assess the use of self-defence pepper spray**
D.T.S. Morela STRANO – *Interregional Forensic Science Police Office of Torino*
- 11.10 – 11.30 **Coffee Break**
- Session 2, chairs: C.C.T. Sabino NAPOLETANO, Donatella CARUSO**
- 11.30 – 11.50 **Forensic analytical chemistry: the activities of police forces**
Egidio LUMACA, *Expertise in Forensic Science Police Service, Rome*
- 11.50 – 12.05 **Solving "Cold Cases" by HRMS Toxicology Screening**
Vincent DI FAZIO – *National Institute of Criminalistics and Criminology, Bruxelles*
- 12.05 – 12.20 **Untargeted investigation of NPS: UHPLC-HRMS analysis and Cloud-MS-database comparison**
Ten. Col. Adolfo GREGORI – *Forensic science laboratories of Carabinieri Force (RaCIS), Rome*
- 12.20 – 12.35 **Near-Infrared hyperspectral imaging (NIR-HSI): a powerful tool in forensic sciences**
Paolo OLIVERI – *University of Genova*
- 12.35 – 12.50 **Application of LC-ESI-MS/MS to the determination of illicit drugs and medicines in blood samples in the context of the Italian National Street Code Art. 187.**
Marco AGOSTINI – *Toxicology laboratory – A.S.U.R. AV1 –Pesaro*
- 12.50 – 13.05 **Uncovering the past: the power of GC-TOF and GCxGC TOF**
Marcello MANFREDI – *University of Piemonte Orientale, Alessandria*

SCIENTIFIC COMMITTEE

Mass Spectrometry Division of SCI
Donatella CARUSO, Gianluca GIORGI, Fulvio MAGNI
Emanuela GREGORI

Analytical Chemistry Division of SCI
Roberta CURINI, Alessandro GIUFFRIDA
Manuel SERGI, Marco VINCENTI

International Atomic Energy Agency: Francesco Saverio ROMOLO
Forensic Science Police Service: Sabino NAPOLETANO

13.05 – 13.10 Investigations and analysis of cocaine from clandestine "laboratory"

D.T.S. Guido PERSICO – *Interregional Forensic Science Police Office of Naples*

13.10 – 13.15 White Spirit, Black Widow (in the land of Red Chicory)

D.T.S. Gabriele GRIGOLI – *Interregional Forensic Science Police Office of Padova*

13.15 – 14.45 Business Lunch – Poster Session

Session 3, chairs: D.T.S. Damiano RICCI, Emanuela GREGORI

14.45 – 15.00 Home-made explosives: analytical approaches and case reports

D.T.S. Paolo ZACCHEI – *Central Anticrime Directorate of Italian National Police, Forensic Science Police Service (DAC-SPS), Rome*

15.00 – 15.15 An ocfeentanil-related death case: UHPLC-MS analysis of the drug and its metabolites

Marica ORIOLI – *Laboratory of Forensic Toxicology, University of Milan*

15.15 – 15.30 Untargeted approach and retrospective analysis: new opportunities for forensic investigations

Rossana SCARPONE – *IZS dell'Abruzzo e del Molise, Teramo*

15.30 – 15.45 MS Investigation on Designer Drugs by Retrosynthetic Analysis

Cap. Giuliano IACOBELLIS – *Forensic science laboratories of Carabinieri Force (RaCIS), Rome*

15.45 – 16.00 Desorption electrospray ionization-high resolution mass spectrometry for screening the presence of new psychoactive substances in oral fluid

Federica BIANCHI – *University of Parma*

16.00 - 16.05 Indoor illegal grow marijuana site, with low THC levels

D.T.S. Morela STRANO – *Interregional Forensic Science Police Office of Torino*

16.05 – 16.10 Trace Evidence Analysis: Forensic examination of fibres

C.C.T. Elena LUCATELLI – *Forensic Science Police Service (DAC-SPS), Rome*

16.10 – 16.30 Tea Break

Session 4, chairs: C.C.T. Elena LUCATELLI – Alessandro GIUFFRIDA

16.30 – 16.45 The future perspectives of mass spectrometry: an ever-wider horizon with use in clinical emergencies of toxicological interest

Elia DEL BORRELLO – *Expertise in Forensic Toxicological Lab, Legal Medicine Office, Bologna*

16.45 – 17.00 Synthetic isoflavones and doping: influence on the urinary steroid profile studied by gas chromatography – mass spectrometry

Michele IANNONE – *FMSI Antidoping Laboratory, Rome*

17.00 – 17.15 A novel approach for the determination of OGSR by means UHPLC-HESI-HRMS

Flaminia VINCENTI – *Sapienza – University of Rome*

17.15 – 17.30 New Psychoactive Substances: metabolite identification by means complementary approach

Federico FANTI – *University of Teramo*

17.30 – 17.40 Conclusions

ORGANIZING COMMITTEE

Manuel SERGI, Emanuela GREGORI, Sabino NAPOLETANO, Flaminia VINCENTI

ORGANIZATIONAL FORENSIC SCIENCE POLICE SERVICE SUPPORT

Isp. C.T. Antonella QUARESIMA, Isp. C.T. Anna D'ORAZIO
Sov. C.T. Monica MACCHI, Sov. C.T. Pamela CELLINI, Sov. C. Carla Corsi

