



PRESIDENZA DEL CONSIGLIO DEI MINISTRI  
Ministro per la Cooperazione Internazionale e l'Integrazione  
**Dipartimento Politiche Antidroga**

# Reitox workshop: exchange on data collection challenges related to new psychoactive substances

19-20 April 2012, Budapest, Hungary

## Panel 3

# New approaches in monitoring and data collections

**Giovanni Serpelloni M.D.** – Italian Department of Antidrug Policies, Presidency of the Council of Ministers  
**Elisabetta Simeoni, Silvia Zanone** – Italian Focal Point, Department of Antidrug Policies  
**Teodora Macchia, Gustavo Merola** – National Early Warning System, Istituto Superiore di Sanità  
**Carlo Locatelli** – National Early Warning System, Pavia Poison Control Centre, “S.Maugeri” Foundation  
**Claudia Rimondo** – National Early Warning System, Verona Addiction Department, Italy



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## Research Projects on NPS in Italy

**Gustavo Merola** – University of Verona; Italian National Institute of Health

**Franco Tagliaro** – University of Verona

**Salvatore Fanali** – Italian National Research Council





# Research Projects on NPS in Italy

- Searchable Database of all new psychoactive substances reported by OEDT
- Miniaturized chromatographic procedure for screening of new psychoactive substances
- Capillary electrophoresis for the analysis of new psychoactive substances
- Direct screening of herbal blends for new synthetic cannabinoids by MALDI-TOF MS



# NPS Database

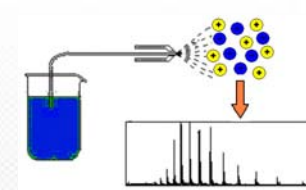
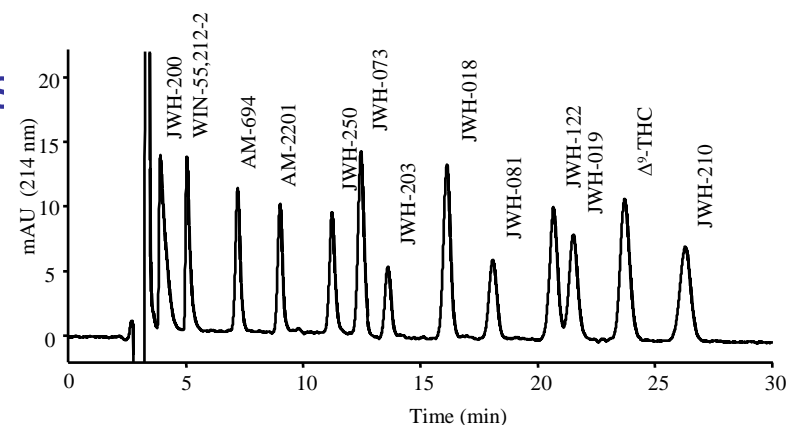
PROIEZIONE VIDEO





# Nano-LC-UV procedure for the identification of synthetic cannabinoids

- Most diffused synthetic cannabinoids
- Good sensitivity
- High efficiency
- Short analysis time
- Coupling with MS system (easy)
- Low amount of sample
- Minimal consumption of reagents

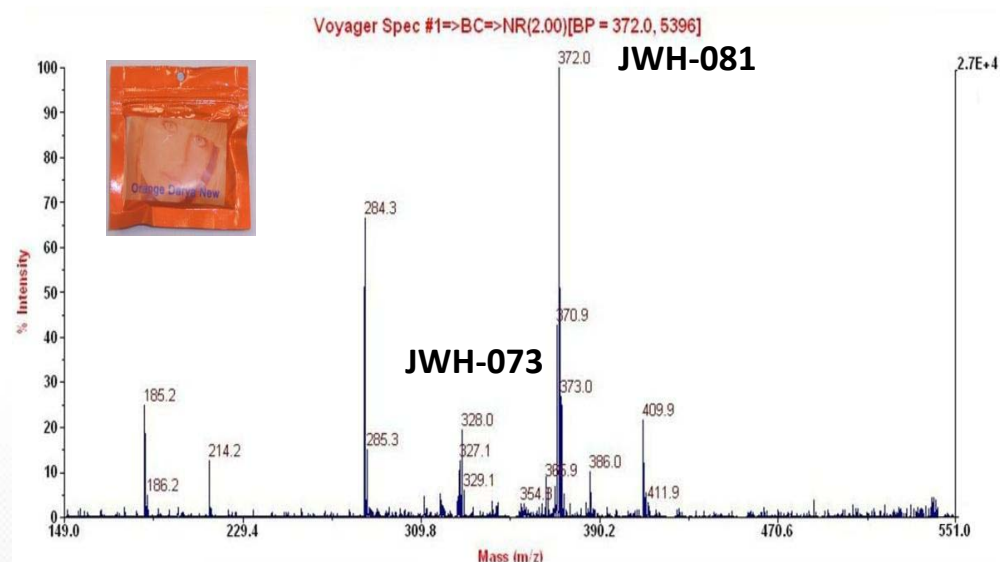




# Direct screening of herbal blends for new synthetic cannabinoids by MALDI-TOF MS.



leaves were finely ground in a mortar and directly loaded onto the MALDI plate



Gottardo R., Chiarini A., Dal Prà I., Seri C., Rimondo C., Serpelloni G., Armato U., Tagliaro F., *J. Mass Spectrom* 2012, 47: 141-46.