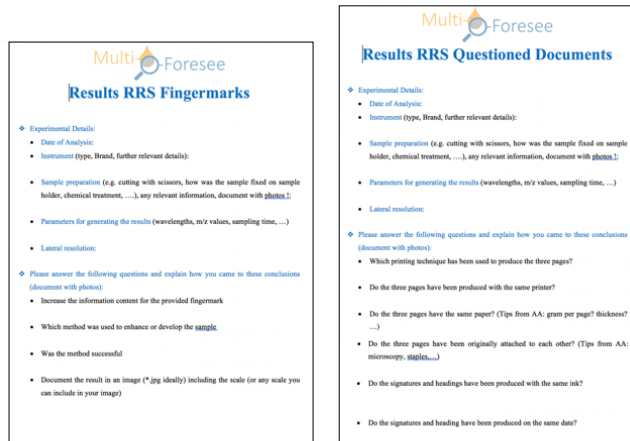


**Sheffield, UK, July 2<sup>nd</sup>, 2018**  
**WG 1 Meeting – Analytical Strand, Meeting Minutes**

The meeting started on July 2<sup>nd</sup> at 08:10 with an introduction of Simona Francese (SF) followed by a short summary for the Round Robin Studies (RRS) given by Alessandro Travellini (AT) und Martina Marchetti-Deschmann (MMD). At 8:30 the work groups split in the two separate groups and meet only for Coffee at 10:00 and lunch at 13:00.

**1) Welcome and short remarks of WG1 leader (MMD):**

MMD reminds the group about the call for this RRS. The participants were receiving the samples in April 2018 and were asked to hand in a report following a template provided by MMD:




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Only very few WG1 members used the reporting template which makes summary of the results difficult as MMD points out.

To Do:

⇒ all group members provide their results in accordance with the templates; the files will be uploaded by the participants themselves to an OwnCloud folder provided by MMD.

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**2) Discussion of RRS 2 results of document analysis (each group presents its own results; power point slides are available as addendum):**

Questions to be answered:

- Which printing technique has been used to produce the three pages?
- Do the three pages have been produced with the same printer?
- Do the three pages have the same paper? (Tips from AA: gram per page? thickness? ...)
- Do the three pages have been originally attached to each other? (Tips from AA: microscopy, staples,...)
- Do the signatures and headings have been produced with the same ink?
- Do the signatures and heading have been produced on the same date?

Detailed results from the groups are summarized in a ppt file and will be available after the next WG meeting in November in Dubrovnik.

*Keyfindings:*

*There was no technology not capable of giving some information on the samples. No technology could give an answer to the last question (same date for signature)*

### **3) Discussion of RRS 2 results of fingerprint analysis:**

Questions to be answered:

- Try to enhance all 4 samples using any imaging method available in your laboratory.
- If imaging is successful- photograph! (using the provided scale)
- Answer the following questions for each of the 4 samples.
  - Which method was used to enhance or develop the sample (in detail) ?
  - Was the method successful? (yes/no)

Michal Levin (ML) was collecting the data and sent an Email to MMD summarizing the results received so far; results came in from Simona Francese, Andy Becue, Safarik Ivo, Meanlie Baily and from Latvia.

*Keyfindings:*

*Improved information was only available from the MS based analyses.*

Detailed results from the groups are summarized in a ppt file and will be available after the next WG meeting in November in Dubrovnik.

### **4) Summary for both RRS**

Many data – not imaging correlated were provided. This is not the focus of the COST action and will not be further considered.

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The group came to the following agreement:

- ⇒ The participants of WG1 have now the chance to improve the results during the summer months and have to hand in the results till end of September.
  - ⇒ The summary of all results will be available only after the Dubrovnik meeting (no bias for the analyses performed during summer months).
  - ⇒ This summary will be a point-by-point report for single task handed out with the samples
  - ⇒ Results will be put together in a paper focussing on the techniques and the possibilities of every methodology to answer certain forensic questions; emphasis has to be laid on the differences between case work and upcoming new techniques
- 

### **5) Paper Based RRS**

SF again pointed out the importance of this undertaking. Encouraged all participants to provide information in the Excel Sheet. MMD gave every participant the chance to fill in the Excel sheet to provide information important for this task.

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To Do:

- ⇒ all group members provide their data in the google sheet
- ⇒ Arban and Simona Francese liase with people at their home institution who can extract statistical data from such sheet for reporting

## 6) Further Topics

### **Pitch from Simona Francese for collaborations:**

MALDI MSI – superimpose multiple images

MALDI MSI – separation of overlapping marks or separated marks

Needs:

specific imaging software to reconstruct of 2D maps of fingermark --> software dedicated to fingermark analysis

algorithm that quickly extracts the image with the best quality

statistical modelling to quickly separate overlapping ridge patterns using discriminatory chemicals

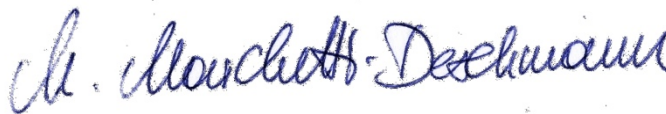
draw regions of interest – extract chemical information

superimpose multiple images

recognition of chemical species using a probabilistic algorithm using an updatable containing m/z of species, MS/MS spectra and drift time to establish a chemical

The WG1 specific meeting ended at 15:00.

Vienna,  
August 10<sup>th</sup>, 2018



Martina Marchetti-Deschmann (WG1 Chair)

**ANNEX**  
**(Available after Nov 10<sup>th</sup>)**