

# XRF USER MEETING – DAY 1

## Sample preparation and QC

EXCHANGE OF KNOWLEDGE, EXPERIENCE AND PRACTICAL TIPS BETWEEN XRF USERS










### Zoom meeting

**When:** October Tuesday 19, 11:00 - 16:00 CET (break 13:00 – 14:00)

PROGRAM
11:00 – 11:10 Opening of the zoom meeting Bertil Magnusson & Camilla Junggren (organisers)
11:10 - 11:30 Introduction to sample preparation for XRF, Bertil Magnusson
11:30 – 12:00 Sample preparation – developments and findings to ensure repeatability, Martin Lischka, Herzog
12:00 – 12:30 Fusion of sulfide ores Rainer Schramm, Fluxana
12:30 – 13:00 The importance of loss on ignition determination for XRF analysis - several practical cases and results, Frédéric Davidts <i>XRF Scientific</i>
13:00 -14:00 Break for lunch
14:00 – 14:20 Quality control of matrix using scattering peaks, Anders Rindby, COX Analytical
14:20 – 14:40 Introduction to internal Quality Control (QC) Bertil Magnusson
14:40 – 15:00 QC in steel industry at Kanthal Petra Hedman, Kanthal
15:00 – 15:20 XRF instrument diagnostics Jakob Noreland & Payman Tehrani, Panalytical,
15:20– 15:40 Eurachem Guidance on method validation
15:40 – 16:00 Discussion – responding to chat
16:00 – End of meeting

# Speakers – Day 1

HERE ARE THE SPEAKERS AT THE XRF MEETING 19 OCTOBER SHORTLY PRESENTED

	<b>Bertil Magnusson</b> Trollboken, organiser Analytical chemist worked mainly with spectroscopy (XRF ICP). Earlier Akzo Nobel and RISE. Author of guidance on measurement quality - Nordtest & Eurachem.		<b>Camilla Junggren</b> Kemistutbildarna & LAB Sweden AB, organiser of courses and user meetings with Kemistutbildarna & sales of reference materials and sample preparation equipment in LAB Sweden AB.
	<b>Frédéric Davidts</b> XRF Scientific Capital Equipment Sales Manager with more than 20 years' experience in XRF sample preparation. Previously at Socachim and R&D chemist at UCL.		<b>Rainer Schramm</b> Fluxana Chemist and XRF specialist. Founder of Fluxana, member of three DIN working groups.
	<b>Jakob Noreland</b> Malvern Panalytical Inorganic chemist with 20 years of experience as application specialist for XRF and XRD in the Nordic countries.		<b>Payman Tehrani</b> Malvern Panalytical Physicist and Sales representative in Sweden focusing mostly on XRF and XRD
	<b>Anders Rindby</b> Cox Analytical Systems Associated CEO 2003 - 2018 Professor in x-ray micro-analysis, Chalmers University of Technology,		<b>Petra Hedman</b> Kanthal AB Chemical engineer with over 20 years of experience in analytical chemistry in the steel industry.
	<b>Martin Lischka</b> Herzog Performing research and development in sampling and sample preparation focusing on automation		



# XRF USER MEETING - DAY 2

## WDXRF & EDXRF

EXCHANGE OF KNOWLEDGE, EXPERIENCE AND PRACTICAL TIPS BETWEEN XRF USERS

### Zoom meeting

**When:** October Wednesday 20, 11:00 - 16:00 CET (break 13:00 – 14:00)

### PROGRAM

11:00 – 11:10 Opening of the zoom meeting Bertil Magnusson & Camilla Junggren (organisers)
11:10 – 11:20 Introduction to WDXRF & EDXRF
11:20 – 11:40 XRF at Glencore Nikkelverk Torkild Eivindsson
11:40 – 12:00 XRF at Höganäs Anna Johnsson, Höganäs Sweden
12:00 – 12:20 Analysis of traces in geological samples with geo-trace-pak Szymon Stolarek, Rigaku
12:20 – 12:40 Embracing the change – How XRF technology supports the development of new technologies for green energy and the changes in the industry Kai Behrens, Bruker
12:40 – 13:00 XRF analysis of colloidal silica (aq solution) Björn Stolpe, Nouryon
<b>13:00 -14:00 Break for lunch</b>
14:00 – 14:20 Uranium & Gadolinium in extracts with EDXRF, Jonas Berntsen Westinghouse & Bertil Magnusson
14:20 – 14:40 Experience with XRF online instrument at Glencore Nikkelverk, Torkild Eivindsson
14:40 – 15:00 Chemical and Structural Analysis of Direct Reduced Iron using XRF and XRD Henrik Fahlquist-Hagert, Thermo. Fisher Scientific
15:00 – 15:20 Analysis of powdered metals Volker Hückelkamp, Spectro
15:20 – 15:40 Introducing Eurachem Guidance on traceability
15:40 – 16:00 Discussion – responding to chat
16:00 – End of Zoom meeting

# Speakers Day 2

HERE ARE THE SPEAKERS AT THE XRF MEETING 20 OCTOBER SHORTLY PRESENTED

	<b>Bertil Magnusson</b> Trollboken, organiser Analytical chemist worked mainly with spectroscopy (XRF ICP). Earlier Akzo Nobel and RISE. Author of guidance on measurement quality - Nordtest & Eurachem.		<b>Camilla Junggren</b> Kemistutbildarna & LAB Sweden AB, organiser of courses and user meetings with Kemistutbildarna & sales of reference materials and sample preparation equipment in LAB Sweden AB.
	<b>Torkild Eivindson</b> Glencore Nikkelverk AS, Analytical chemist and XRF specialist. Earlier work at Elkem with silicon and ferroalloys. Now on-line XRF of process solutions – <b>invited speaker</b> .		<b>Jonas Berntsen</b> Westinghouse Analytical chemist working with XRF, ICP and wet chemistry wet chemistry.
	<b>Björn Stolpe</b> , Nouryon Specialist in atomic spectroscopy at the chemical analysis laboratory of Nouryon in Bohus, Sweden.		<b>Henrik Fahlquist-Hagert</b> Thermo. Fisher Scientific, Materials scientist in structural chemistry. Sales representative for XRF, XRD and spark-OES in the Nordic countries, United Kingdom and Ireland.
	<b>Kai Behrens</b> Bruker XRF Product Manager for the XRF product line of Bruker AXS		<b>Anna Johnsson</b> Höganäs Sweden Method developer in XRF, also working with ICP and titration. Earlier worked with image analysis and programming in close contact with customers.
	<b>Volker Hückelkamp</b> SPECTRO Physicist and XRF Application Scientist with more than 10 years of experience in benchtop and handheld XRF.”		<b>Szymon Stolarek</b> Rigaku Europe XRD and XRF Sales Manager with 20 years of experience in the industry and academia. Coordinating activities in Eastern Europe, Scandinavia and S. Africa.



# XRF USER MEETING – DAY 3

## Handheld XRF

EXCHANGE OF KNOWLEDGE, EXPERIENCE AND PRACTICAL TIPS BETWEEN XRF USERS






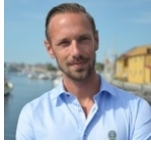

### Zoom meeting

**When:** October Thursday 21, 11:00 - 16:00 CET (break 13:00 – 14:00)

PROGRAM
11:00 – 11:10 Opening of the zoom meeting Bertil Magnusson & Camilla Junggren (organisers)
11:10 - 11:30 Introduction to measurement and handheld XRF, Bertil Magnusson
11:30 – 12:00 The XRF is a dumb machine and can only analyse that which you put in front of it, Maggi Loubser, Univ. of Pretoria
12:00 – 12:30 Pt Pd & Rh in spent catalytic converters with handheld XRF Mathieu Bauer, Thermo Fisher Scientific
12:30 – 13:00 Analysis of paint in boats, Carl Rönnow, Svenska båtunionen
11:45 – 12:00 Discussion – responding to chat
13:00 -14:00 Break for lunch
14:00 – 14:30 pXRF - Geological case study Johannes Holzäpfel Europe EMX
14:30– 14:50 Use of handheld XRF at RISE Andreas Fischer, RISE
14:50 – 15:20 Handheld XRF to identify foundries in sculpture, Maggi Loubser
15:20 – 16:00 Discussion – responding to chat
16:00 – End of meeting

# Speakers – Day 3

HERE ARE THE SPEAKERS AT THE XRF MEETING 21 OCTOBER SHORTLY PRESENTED

	<b>Bertil Magnusson</b> Trollboken, organiser Analytical chemist worked mainly with spectroscopy (XRF ICP). Earlier Akzo Nobel and RISE. Author of guidance on measurement quality - Nordtest & Eurachem.		<b>Camilla Junggren</b> Kemistutbildarna & LAB Sweden AB, organiser of courses and user meetings with Kemistutbildarna & sales of reference materials and sample preparation equipment in LAB Sweden AB.
	<b>Johannes Holzäpfel</b> Europe EMX Over 10 years of experience in the mineral exploration industry.		<b>Maggi Loubser</b> Univ. of Pretoria Analytical chemist with three decades specializing in XRF and has introduced XRF for art and conservation in Africa – <b>invited speaker.</b>
	<b>Mathieu Bauer</b> Thermo Fisher Scientific Analytical chemist and application Scientist for handheld XRF.		<b>Carl Rönnow</b> Svenska båtunionen Environment & Sustainability specialist and XRF project manager. Earlier Environment and Health Administration, City of Stockholm.
	<b>Andreas Fischer</b> Chemistry & Material, RISE Chemical engineer working in analytical chemistry with handheld and WD-XRF.		

