

X-ray fluorescence spectrometry

21 - 25 August 2017, 09:30 - 17:00, 5 days
HAN, Laan van Scheut 2, Nijmegen



PANalytical

Content

This five-day course provides participants with a thorough understanding of the principles and practice of X-ray fluorescence analysis. The emphasis will be on the application of the XRF technique to trace element analysis in geological materials using wavelength dispersive X-ray spectrometry. The operating principles of the instrumentation will be explained and illustrated in detail, as well as ways to select the optimum measurement parameters. Additional topics covered are sample preparation, matrix correction methods and a short introduction to energy dispersive spectrometry.

The course materials include 'Understanding XRF Spectrometry part 1' (a book by James Willis and Andrew Duncan) together with lecture handouts. The content of the course and its presentation is vendor neutral. It is NOT a course on the instrumentation or software of a particular vendor.

Target audience

The course is taught in the framework of the MSc+ program for talents in Master education (University). The course is appropriate for employees at a corresponding level. The course is also aimed at PhD-students in analytical sciences or related fields, who are not specialized in XRF spectrometry (ANAC-basic course). Finally, the course is suitable for graduates (BSc, MSc and PhD) interested in XRF spectrometry and seeking additional knowledge and understanding.

Topics

The following aspects will be covered during the course:

- Introduction to the fundamentals of XRF
- Qualitative analysis
- Selection and setting of instrumental parameters
- Matrix effects
- Sample preparation
- Quantitative XRF analysis for major and trace levels
- Background and line overlap corrections
- Mass absorption coefficients and the relation to Compton radiation

Lecturer



Dr. Bruno Vrebos
Senior XRF application specialist

Bruno Vrebos obtained a PhD from the University of Antwerp, Belgium, on metallurgy and XRF. Since then Bruno has worked as XRF top specialist at PANalytical for more than 30 years. His knowledge about the theory of XRF, the software and XRF instrumentation is far-reaching.

At the end of the course

Participants completing the course will understand XRF as an analytical technique and will be in a much stronger position to successfully carry out XRF analysis.

Course duration and time investment

Course duration: 5 days from 09:30 till 17:00
Participant's investment: 5 days + optional self-study

Extra Information

This course is taught as a Summer Course in the MSc+ program and is taught every two years.

Course fees:

- €800 (ex. BTW/VAT) per day
- COAST members pay a reduced fee of €400 per day (ex. BTW/VAT) or use a wildcard
- KNCV members pay a reduced fee of € 600 per day (ex. BTW/VAT)
- ASTP / MSc+ students: Free

Special fees can be offered to PhD students and companies registering for three or more persons.

For up-to-date information about the course program visit our website at www.ti-coast.com/L3.

Please contact us for more information.

Registration

To register please visit: <http://www.ti-coast.com/registrationsummercourses2017> or fill out, sign and email the form attached to lifelonglearning@ti-coast.com.



TI-COAST: A joint Private-Public initiative

Contact: Iris de Lange | T: +31 20 525 8393 | E: lifelonglearning@ti-coast.com | www.ti-coast.com

MSc+ Summer Course: XRF Spectrometry

v 20170223

Registration Form

X-ray fluorescence spectrometry

21-25 August 2017, 09:30-17:00

Hogeschool Arnhem Nijmegen (HAN), Laan van Scheut 2, Nijmegen

Name	
Organization	
Address	
Billing address (if different from above)	
Educational background	
Email address	
Phone number	

I will attend on the following date(s):

- Day one: 21 August 2017, 09:30-17:00
- Day two: 22 August 2017, 09:00-17:00
- Day three: 23 August 2017, 09:00-17:00
- Day four: 24 August 2017, 09:00-17:00
- Day five: 25 August 2017, 09:00-17:00

Payment

- I will pay the full course fee of €800 per day (ex. BTW/VAT)
- I am a member of KNCV and will pay € 600 per day (ex. BTW/VAT)
- I qualify for 50% discount, because my employer is a COAST participant, and will pay €400 per day (ex. BTW/VAT)
- I am a PhD student and will pay €400 per day (ex. BTW/VAT)
- I am a PhD student from a group participating in COAST and will pay €200 (ex. BTW/VAT) per day
- I have received a wildcard from: Therefore, I will follow this course for free (note: this person must receive a copy of your registration mail, to indicate approval)

Date:

Place:

Signature:

To register, please email the duly signed registration form to lifelonglearning@ti-coast.com