

USER SEMINAR ON FREE-FLOW ELECTROPHORESIS SEPARATION TECHNIQUE AND ITS POTENTIAL APPLICATIONS

APRIL 21-22, 2016 | PFINZTAL, GERMANY



Arbeitsgemeinschaft Elektrochemischer
Forschungsinstitutionen e.V.

FREE-FLOW ELECTROPHORESIS (FFE)

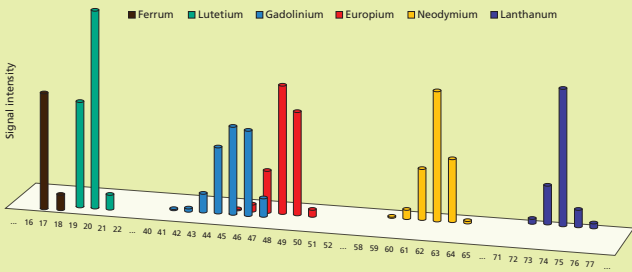
The performance of free-flow electrophoresis (FFE) will be demonstrated in an initial user seminar covering current developments of FFE systems and their application. Speakers from a variety of scientific areas will provide a comprehensive overview of the possible scope of application of the FFE technique.

FFE is most widely applied in the bio-analytical sector. Bacteria, algae, cell organelles, DNA and protein complexes can be separated and enriched. Furthermore, inorganic ions can be completely separated using complexing agents.

On the one hand, the FFE can be used as a pre-cleaning stage, with the aim to detect selectively target analytes. On the other hand, the output of the FFE can undergo further processing, e.g. as a part of a separation procedure. Another development in FFE is the miniaturization of the flow cell, in order to generate higher resolutions.

This seminar is designed to appeal to scientists and equipment manufacturers alike. Presentations will include a critical evaluation of FFE, and will also address everyday problems.

FFE separation of 5 lanthanides besides ferrum over the whole separation range.



INVITED SPEAKERS AND THEIR TOPICS

Prof. Dr. A. Völkl | University of Heidelberg

From octopus to prometheus – the isolation and purification of cell organelles and protein complexes by FFE

K. Büttner | Ernst-Moritz-Arndt-University, Greifswald

Use of FFE for depletion of human serum

W. Teale | Biology II, University of Freiburg

An FFE-based protocol for the identification of protein-protein interactions

Dr. G. Dame | Technical Faculty, Albert-Ludwigs-University, Freiburg

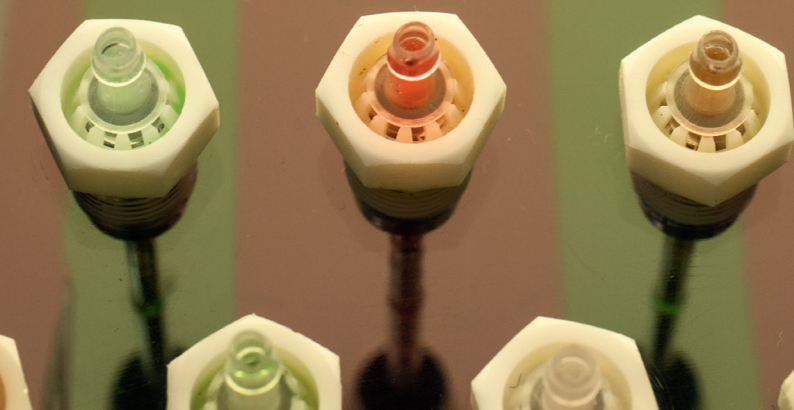
Lab-on-chip systems with integrated FFE for the focusing of bacteria and green algae for the point of care testing

Dr. K. Drese | Fraunhofer ICT-IMM, Mainz

Presentation of chip-based microfluidic

Dr. T. Scherer | Fraunhofer IGB, Stuttgart

N.N.



Prof. Dr. L. Eichacker | University of Stavanger, Norway

Mass spectrometry identification of free flow separated protein complexes from the thylakoid membrane of *Arabidopsis thaliana*

Dr. H. Zischka | Institute of Molecular Toxicology and Pharmacology, Helmholtz, Munich

The FFE analysis of mitochondrial damage by toxic substances

Prof. Dr. C. Niemeyer | Karlsruhe Institute of Technology KIT, Karlsruhe

Purification of protein-functionalized DNA nanostructures

Dr. M. Abert | Fraunhofer ICT, Pfinztal

Purification of drinking water for the determination of the lanthanides and actinides

Dr. R. Wildgruber, Dr. G. Weber, Dr. C. Timm | FFE Service, Munich

Latest applications of FFE separation techniques



FURTHER DETAILS

- The seminar will take place from 21st to 22nd April 2016. The two-day duration will allow sufficient time for in-depth discussions.
- Language: Presentations can be held in English or German. Written material should be in English only.
- At the end of the first day we will offer a tour through the Fraunhofer Institute for Chemical Technology, followed by a barbecue dinner.
- The costs of the meeting is 150 € for participants from research facilities and 200 € for participants from industry (costs include food and drinks)
- A limited space is available for exhibits or posters. If you would like to use this opportunity (no additional cost), please indicate this option when you register for the seminar.
- Internet access is available on site. If you require access, please indicate this when you register.

PICTURE ABOVE

Example of a micro fluidic chip from Fraunhofer ICT-IMM.

COVER PICTURE

Drops from the outlet of the FFE setup.

DEADLINES

- Call for presentations (submission of abstract):
January 15th 2016
- Registration for the seminar: March 7th 2016

REGISTRATION

Please register via e-mail at the following address:
dominique.buch@ict.fraunhofer.de

LOCATION OF THE SEMINAR

Fraunhofer Institute for Chemical Technology ICT
Joseph-von-Fraunhofer-Straße 7
76327 Pfinztal (Berghausen), Germany

FOR MORE INFORMATION

www.agef.org

ACCOMMODATION

There's a room contingent for the night of April 21st to April 22nd 2016 which you can retrieve using the keyword "FFE" until March 7th 2016. For questions, please feel free to contact family Weber and their team:.

AAAA Hotelwelt Kübler	Fon +49 (0)721 / 144 - 0
Bismarckstr. 37-41	Fax +49 (0)721 / 22639
76133 Karlsruhe	info@aaaa-hotelwelt.de
	www.aaaa-hotelwelt.de