FILTECH 2016

October 11 – 13, 2016
Koelnmesse · Cologne · Germany

FILTECH
October 11 – 13, 2016
Cologne – Germany
The Filtration Event
www.Filtech.de

Important Information for FILTECH Presenters

All Authors must supply 2 versions of their paper/s to be submitted for oral and short oral /poster presentation: A short version (1 page, word document) for publication in the Abstract Book and long version (6-18 pages, PDF) for electronic publication. Short oral presenters must also submit their posters.

All files can be uploaded in the Speakers Area

Deadline Posters and Full Papers: July 14, 2016

Paper Version 1 (1 page word document)

The first one is a **1 page abstract** in word format which will be published in the FILTECH Abstract Book.

It should contain:

- **Title**
  Arial, 14 pt, capital letters, bold, center aligned
- **Author(s) with address**
  Arial, 12 pt, center aligned
- **Start 1 page short version (Background, Aim, Method, Main results, keywords)**
  Arial, 12 pt, left- and right-justified
- **Finish with 4–6 keywords from keyword list**
  Arial, 12 pt, center aligned
- Figures, diagrams and tables should be inserted in the appropriate position using the same typing
- Do not use coloured figures, photos etc. as the Abstract Book will be printed in black/white
- Prepare in A4 format (21.0 cm x 29.7 cm) with margins of 2.5 cm
- Use keywords from the keyword list to allow indexing of your paper

Paper Version 2 (6–18 pages PDF-file)

The second version is a **6-18 pages version** which should include the abstract (version 1) as a first page.

It will be published electronically (CD/USB-stick).

The length of the paper can vary between 6 and 18 pages in total.

Please note that 6 pages are a minimum. Shorter papers cannot be accepted. A Text version is required Powerpoint Presentations are not accepted.

FORMATING
Prepare in A4 format (21.0 cm x 29.7 cm) with margins of 2.5 cm

- You can use coloured figures, photos etc.
- Start with your version 1 as the first page
- Start your full paper on the second page
- Please do not use any kind of pagination, footer or header

Prepare your presentation in a 16:9 aspect ratio

Upload your paper at: services.filtech.de
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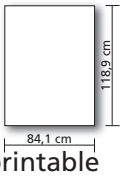
NEW · Poster Printing Service

Poster Upload

FILTECH provides a new Service: We will print your poster and set it up, You just have to provide us with a printable file until July 14, 2016.

A good poster strikes a balance between giving too much or too little information. An effective poster presentation is not just a report or journal article hung on the wall. It should highlight the major points of the topic in a form that the viewer can absorb in a few minutes.



- The size of your file is DIN A0
  84,1 cm wide and 118,9 cm high
- Please prepare your poster in A0 format e.g in Powerpoint, and provide us with a printable PDF in a high resolution (pictures should have min. 150 dpi in original size). In case you use powerpoint please change your sheet to a user-defined format in A0.
- Please do only use system fonts. If you work with microsoft programs, please do not modify the fonts electronically but use the original font. E.g. use the font arial bold instead of ticking the button for fattening, or use the font arial italic (kursiv) instead of ticking the button italicize.
- You will receive a Pdf for revision before the show, the organizer will print your poster and set it up on poster walls, .

If your file ist too large to upload it in the speaker area (10MB+) you can use e.g www.wetransfer.com (this is a cost free service) to transfer your file. In this case Please send your file until to 14, July 2016 via "we transfer" to gerd@filtech.de
Please mention: authors name , title and Paper number.

Tips for Preparing Posters

Keep the text brief.

Don't use all capital letters for text. It is harder to read than upper & lower cases.

Use graphics (charts, tables, pictures) that can be understood in a minute or less.

Emphasize important information by using color, different type sizes, etc.

Too many colors or fonts can be distracting. An effective poster is interesting without being too flamboyant.

Assume that people will be looking at your poster from about 1 meter away, and design it to be read from that distance.

Technical Equipment

- Conference rooms are equipped with large screen projectors for PC presentations
- You can check your A/V presentation before the session in the conference room
- A PC laptop is available in each conference room. Please bring your presentration on a USB Stick and if possible also a CDrom as backup.

Technicians

- Each Conference room is serviced by a technician, who will help in any case of any complicacy.

Presentation

- All speakers must contact their session chairman in the conference room prior to their session
- Poster presentations include a short oral presentation of 5 minutes in the session room. The short oral poster presentation in the session rooms will be followed by individual presentations of the authors in front of the posters directly after every poster session. Authors with a short oral/poster presentation are asked to be present in front of their poster after their session and if possible during congress breaks

Prepare your presentation in a 16:9 aspect ratio

Deadline Posters and Full Papers: July 14, 2016

SAMPLE PAGE / FIRST PAGE

ONLINE MEASUREMENT OF CENTRATE SOLIDS CONTENT FOR CENTRIFUGATION PROCESS MONITORING AND CONTROL

Title: Arial 14 pt, capital letters, bold, centre aligned

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ABSTRACT

Nowadays submicron particles are applied in various industrial sectors. CMP slurries in silicon wafer industry, pigments for coatings or varnishes and iron oxide particles in cancer treatment are just a few examples. Usually there are special requirements on the particle system as a narrow size distribution and limits concerning fine or coarse material. However, most particle synthesis techniques provide wide size distributions leading to the necessity of subsequent classification steps. Due to their high relative centrifugal force (RCF) cut sizes of less than 100 nm can be reached by using tubular bowl centrifuges. Competitive processes such as filter centrifuges or filters are limited to lab scale or lead to the irreversible loss of a significant amount of the solid matter. In contrast to that, tubular bowl centrifuges are scalable and offer the use of both fine and coarse fraction. The separation process in tubular bowl centrifuges is a semi-continuous process. Sediment built-up during the process leads to a decreasing free volume for the suspension and therefore to a loss in residence time. As a result of that, there is a decrease in grade efficiency.

A novel approach is to compensate this disadvantage by a dynamic increase of the rotational speed. Thus relevant output parameters like product loss and grade efficiency are kept constant. The idea is realized by an online measurement of solids concentration at the outlet of the centrifuge. A turbidity sensor (Visolid, *WTW GmbH*) is used for that task. The acquisition of the total suspended solids is carried out as a scattered light measurement. The signal is implemented into a control cycle which is using the rotational speed of the centrifuge (GLE, *Carl Padberg Zentrifugenbau GmbH*) as a correcting variable. When the desired solids concentration is exceeded, rotational speed is increased. Experiments show fitness of the sensor to a large concentration range and - after an appropriate calibration - no limitation concerning the particle system. A special flow-through cell which is also suitable for low flow rates improves the controllability of the system. Depending on the particle system, product loss and grade efficiency can nearly be kept constant up to high filling levels of the rotor. In summary, a direct monitoring of the solids content at the centrifuge outlet is suitable for an acquisition of the relevant separation process parameters. Furthermore, the measured values may be used for process optimization by dynamic speed control. This technology represents a perspective for future centrifuges. Especially with fast-running machines a constant cut size in the nanometer range will be accessible.

Abstract: Arial 12 pt, left- and right justified

KEYWORDS

Centrifugation, Process Monitoring and Control, Separation of Nanoparticles, Classificati...

4-7 Keywords: Arial 12 pt, centre aligned