

## BIOLAB Seminars @ ARABLAB 2018

Time: Sunday, 18<sup>th</sup> march, 15:00 o'clock

Place: "The Labmate Theatre"

### Title: Automated two-step purification of antibodies

**Abstract:** Antibodies (immunoglobulins, Ig's) are part of the immune system. They can identify and bind particular antigens thereby neutralizing them. Due to their specific target recognition/binding function they have a significant importance in the biotechnology and pharmaceutical industry. Key applications are the diagnosis and treatment of diseases. Besides, antibodies are also the crucial components in numerous research applications such as Western Blots and immunoassays. Quality and purity of the IgG is crucial for these applications. The purification of antibodies involves two to three steps:

1. capture step
2. optional intermediated step
3. polishing step

The transition from one to another step generally involves manual interaction and thus is time consuming. Automation by combining affinity chromatography step with a gel filtration step to exchange the buffer of the purified antibodies increases the efficiency and optimize the workflow. The quick and automated linkage of multiple chromatographic purification steps into one method eliminates manual sample handling and minimizes time spent between steps. This automation strategy can be easily adapted to other purification tasks.

#### Speaker profile:



Dr. Stephanie Runde, born in Munich (1984) studied Biochemistry at Technical University of Munich, where she got her PhD in 2014. And She works since then as product manager at KNAUER Wissenschaftliche Geräte GmbH and is responsible for the complete portfolio of FPLC and purification products.