



The  
University  
Of  
Sheffield.

Chemical &  
Biological  
Engineering

# HANDS ON Workshop in Continuous Powder Processing

**Diamond Integrated Pilot Plant**  
Sheffield, UK, 25<sup>th</sup> & 26<sup>th</sup> June 2020





The  
University  
Of  
Sheffield.

## Chemical & Biological Engineering

This two-day workshop will comprise of hands-on experience on a continuous powder processing line (ConsiGma25 and Modul P tablet press) in addition to some lectures that will present the current challenges and the latest developments in the field of granulation, drying and tableting processes.

The workshop will be mostly focused on the practical aspects of continuous processing so most of the time will be spent in the Diamond Pilot Plant (DiPP).

This hands-on workshop will be held in the cutting edge Diamond building, at the University of Sheffield using the Pilot Plant facility. The programme will begin with registration at 08:30 a.m. on Thursday 25th June 2020.

The workshop is designed for those who have an interest in gaining practical knowledge in continuous powder processing and those working in the field of granulation and tableting as well as PhD students.

We look forward to welcoming you to Sheffield in 2020.

Prof. Agba Salman





The  
University  
Of  
Sheffield.

Chemical &  
Biological  
Engineering

## PROGRAM

### Day 1: Thursday 25<sup>th</sup> June 2020

08:30-09:20	Registration
09:20-09:30	Introduction
09:30-10:30	Lecture 1: Introduction to continuous granulation
10:30-11:00	Coffee Break
11:00-12:30	<b>Practical sessions 1</b> Continuous granulation line (Consignma 25): <ul style="list-style-type: none"><li>• Overview of the unit operations of the line</li><li>• Assembling/ disassembling the twin screw granulator (TSG)</li><li>• Overview of the control panel</li><li>• Creating recipe and starting up a campaign</li><li>• Critical process parameters in the TSG and effect on the granule critical quality attribute (CQA)</li></ul>
12:30-13:30	Lunch
13:30-15:00	<b>Practical sessions 2</b> Segmented fluidized bed, cone mill and the blending unit: <ul style="list-style-type: none"><li>• Overview of individual unit operations.</li><li>• The critical process parameters of individual unit operations and their effect on the granule CQA</li></ul>
15:00:-15:30	Coffee break
15:30-17:00	<b>Practical sessions 3</b> Module P tablet press: <ul style="list-style-type: none"><li>• Overview of the Module P tablet press</li><li>• The critical process parameters</li><li>• Tablet critical quality attributes</li></ul>



The  
University  
Of  
Sheffield.

Chemical &  
Biological  
Engineering

## PROGRAM

### Day 2: Friday 26th June 2020

09:30-10:30	Lecture 2: Fluidized bed dryer
10:30-11:00	Coffee Break
11:00-12:30	<b>Practical sessions 4</b> <ul style="list-style-type: none"><li>• Tracing and monitoring the feed powder and the products through the complete continuous line.</li><li>• Effect of the process and formulation parameters of the twin screw on the final tablet properties</li></ul>
12:30-13:30	Lunch
13.30-15:00	<b>Practical sessions 5</b> <ul style="list-style-type: none"><li>• Effect of the fluidized bed, milling and blending unit process parameters on the final tablet properties</li></ul>
15:00-15:30	Coffee break
15:30-17:00	<b>Practical sessions 6</b> <ul style="list-style-type: none"><li>• Operating the whole line in automatic mode</li><li>• Extracting the data and how to track the data for an individual cell</li><li>• Finishing and shutting down the whole line</li></ul>

### How to register

The cost of the registration is £1000 per person.

To register please use the following link: <https://onlineshop.shef.ac.uk/product-catalogue/faculty-of-engineering/chemical-biological-engineering/hands-on-workshop-in-continuous-manufacturing>

For more information about the course please visit the following website:

<https://www.sheffield.ac.uk/agglom/workshop>

For more information, please contact:

Dr. Riyadh Al- Asady ([granulationworkshop@sheffield.ac.uk](mailto:granulationworkshop@sheffield.ac.uk))