







# **IN-PERSON TECHNICAL SEMINAR...**

Focusing on Granulation & Coating Technologies







#### **OVERVIEW**

#### **FREUND**

Since 1964, The FREUND group has been a global leader of processing solutions for powders, particles, beads, pellets, tablets, and other solid materials for industries including pharmaceutical, nutraceutical, food, industrial, energy, and many more.

Applications include wet and dry granulation, drying, agglomerating, coatings, layering, instantizing, densification, and powder handling.

#### WHY ATTEND?

In our workshop, participants will actively participate in a practical and theoretical introduction to solid material processing. A comparison overview of fluid bed granulation and coating, high shear wet granulation, roll compaction dry granulation, tablet pan coating and spray drying will be presented and demonstrated.







# AGENDA

#### DAY ONE | Tuesday, 2025, November 11

It's a Matter of Understanding!		
8:30am to 8:45 am	Welcome/Introductions	Raffaella Colombo
8:45 am to 9:30 am	High Shear Technology: Wet Granulation & Milling	Tim Smith
9:30 am to 10:15 am	Fluid Bed Technology: Top Spray Granulation	Jonathan Scotti
10:15 am to 10:30 am	Break	
10:30 am to 11:15 am	Roll Compaction Technology: Dry Granulation	Jack Kenny
11:15 am to 12:00 pm	NIR PAT Applications for Process Monitoring  • Moisture  • Particle Size Distribution  • Film Thickness	Emiliano Genorini Viavi Solutions
12:00 pm to 13:00 pm	Catered Lunch	
	LAB SESSIONS   13:00 pm - 17:00 pm	
High Shear Wet Granulation  • Proper Equipment Set-Up  • Wet Milling  • Fluid Bed Drying  • Product Analysis (LOD Analysis)		Giuseppe Buratti
Fluid Bed: Top Spray Granulation + PAT  • Proper Equipment Set-Up  • Proper Product Movement  • Process Optimization  • Product Analysis (QICPIC + NIR Moisture and PSD)		Jonathan Scotti
Roll Compaction: Dry • Dry Milling • Process Optimizatio • Product Analysis (QI	n	Jack Kenny
17:00 pm	Wrap Up/Leave for Hotel	
19:00 pm Dinner		



## **AGENDA**

#### DAY TWO | Wednesday, 2025, November 12

It's a Matter of Understanding!			
8:30 am to 9:15 am	Fluid Bed Technology: Wurster Spray Coating	Jonathan Scotti	
9:15 am to 10:00 am	Fluid Bed Technology: GXR Rotor Processor Coating of Multi-Particulates  • Applications  • Process Principles  • Equipment Design  • Scale-Up and Optimization	Tim Smith	
10:00 am to 10:15 am	Break		
10:15 am to 11:15 am	Basics of Film Coating Formulation:  • Basic Formulation Ingredients – Polymers, Plasticizers, Colorants and Solvents	Alberto Genovesi Colorcon	
11:15 am to 12:00 pm	Excipients for granulation: State of the Art and Future Directions:  • Selection of Excipients  • Use of Binders, Fillers, Glidants, Lubricants  & Disintegrants	Prof. Anna Scomparin University of Torino	
12:00 pm to 12:30 pm	Spray Drying Technology  • Applications  • Process Principles  • Equipment Design	Jack Kenny	
12:30 pm to 13:30 pm	Catered Lunch		
	LAB SESSIONS   13:30 pm - 16:30 pm		
Fluid Bed: Wurster (Bottom) Spray Coating  • Proper Equipment Set-Up  • Proper Product Movement  • Process Optimization  • Product Analysis (QICPIC)		Jonathan Scotti	
Fluid Bed: Rotor Powder Layering  • Proper Product Movement  • Proper Spray System Set-Up  • Process Optimization  • Product Analysis (QICPIC)		Tim Smith	
16:30 pm	Wrap Up	1	
18:30 pm	Activity/Dinner		



# AGENDA

#### DAY THREE | Thursday, 2025, November 13

It's a Matter of Understanding!				
8:30 am to 9:15 am	Perforated Pan Coating Technology	Jack Kenny		
9:15 am to 10:00 am	<ul> <li>Equipment and Process Trouble Shooting</li> <li>Granulation Processes and Equipment</li> <li>Coating Processes and Equipment</li> </ul>	Tim Smith		
LAB SESSIONS   10:00 am - 13:00 pm				
Tablet Pan Coating + NIR  • Proper Equipment Set-Up  • Proper Product Movement  • Process Optimization  • NIR Film Thickness Analysis		Giuseppe Buratti Jonathan Scotti		
Spray Drying  Proper Atomization Techniques Proper Spray System Set-Up Process Optimization Product Analysis (QICPIC)		Jack Kenny		
13:00 pm to 14:00 pm Catered Lunch/Seminar Complete				





## LIST OF PRESENTERS



Raffaella Colombo
International Sales Manager
raffaella.colombo@freundglobal.com

Raffaella's background is in the packaging equipment for the pharma industry and has been working in that industry for more than 10 years. She was with our sister company FRUEND S.r.l for six years before joining FREUND Inc. six years ago. She have a degree in Foreign Languages and Literatures by IULM University in Milan, and can speak six languages: English, Russian, French, German, Italian and very basic Modern Chinese. With over 35 years of sales experience, Raffaella enjoy talking with customers and figuring out the right solutions for their products.



**Giuseppe Buratti**Deputy Branch Manager
giuseppe.buratti@freundglobal.com

Having graduated in industrial chemistry, Giuseppe took his first steps in the pharmaceutical industry as analyst of formulations intended for clinical trials. He has been involved in formulation and development of oral solid forms for approximately 25 years as well as scaling up and technology transfer from laboratory to industrial scale. Since 2016, he has been working at the FREUND Inc. European Laboratory and is involved in the development of processes for customer support and equipment demonstration for the pharmaceutical, nutritional, chemical, and nuclear sectors. He contributed to company visibility by publishing posters and scientific articles.



Jonathan Scotti

Junior Process Development Scientist
jonathan.scotti@freundglobal.com

Jonathan Scotti achieved the master's degree in Pharmaceutical Chemistry and Technology in 2024. While completing his studies, he worked on a project in collaboration with the department of Pharmaceutical Technology of the University of Milan and FREUND Inc. involving the equipment of Fluid Bed Dryer and the techniques of Solution Coating and Powder layering. The experience he had during this period highlighted his interest in the field and at the end of 2024, he joined FREUND Inc. European Laboratory as Junior Process Development Scientist.



**Tim Smith**Senior Process Development Scientist
tim.smith@freundglobal.com

Tim has been involved with the design and development of equipment and processes for the pharmaceutical, food, confectionary, energy, aerospace, computer, aseptic, and natural resource industries for over 40 years. Tim has worked in university and corporate settings as a research and development engineer, process application engineer, project manager, and is currently a process development scientist at FREUND Inc. Tim participates in university and industry seminars/webinars, poster presentations at AAPS, and has written a book chapter and trade journal articles in order to share his processing experiences. Tim has a BS in Chemical Engineering and a MS in Food Science from Iowa State University.



## LIST OF PRESENTERS



Jack Kenny
Process Development Scientist
jack.kenny@freundglobal.com

Jack started at FREUND Inc. in June of last year. He graduated from Iowa State University with a BS in chemical engineering. Since starting in the lab, he has worked on a multitude of processes. In the past year, Jack has worked with customers both in the lab and at process sites, collaborated on R&D projects, and helped troubleshoot customer processes.



**Emiliano Genorini** Account Manager, EMEA & LATAM - MicroNIR, Viavi

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Dr. Emiliano Genorini (\*1973) has a degree in chemistry with a specialization in analytical chemistry of environmental pollutants. He has more than 20 years of experience in the field of NIR spectroscopy and extensive market knowledge in the pharmaceutical and food industries. After working for manufacturers of various top instrument brands, he has been responsible for the EMEA and LATAM regions for VIAVI Solutions as an account manager since 2015. Since 2003 he has been an honorary professor of chemometrics at the Universities of Milan and Pavia.



Anna Scomparin
Associate Professor, University of Torino
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Anna Scomparin holds a M.Sc. degree in Pharmaceutical Chemistry and Technology (2006) and a Ph.D. in Molecular Sciences (2010) from the University of Padova. Since 2021 she is an Associate Professor in Pharmaceutical Technology at the Department of Drug Science and Technology at the University of Torino. Anna's research focuses on the development of polymer-based nanomedicines, including polymer therapeutics, polyplexes, and nanoparticles for cancer vaccination. Furthermore, Anna is working on the development of polysaccharide-based granules and orodispersible dosage forms for paediatric formulations.



Alberto Genovesi
Senior Area Technical Manager, Colorcon
agenovesi@colorcon.com

Alberto Genovesi obtained the degree in Pharmaceutical Chemistry and Pharmaceutical Technology at the University of Bologna. Since 2005 he works as Senior Technical Manager for Colorcon. On his role, he has a technical responsibility of Italy, Greece, Malta, Cyprus, Israel and Italian speaking part of Switzerland. Prior to Colorcon, he worked in a Pharmaceutical Company as R&D process development Scientist and for a Manufacturing Equipment Supplier as R&D Manager specialised on Film Coating and Granulation Technology supporting Customers with in-house and on the field trials.



### INTERNATIONAL SALES



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## STAY CONNECTED

We are always here for you to answer questions or talk solutions for current or upcoming projects!

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# FREUND Inc. Granulation & Coating Technology Seminar

#### 11-13 November, 2025

#### REGISTRATION FORM (editable PDF)

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Cardholder's Name: (Please Print)				
Card #	E	Exp. Date: (mm/yy)		
VISA Master Card	American Express	Security Code:		
Credit Card				
Bank Wire (Payable to FREUND Inc.)				
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SEMINAR FEE: €950.00	-			
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Name:				

#### **Return Registration Form:**

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