



Tablet & Capsule Development

NOVEMBER 18-20, 2025

NATOLI SCIENTIFIC - TELFORD, PA

**Tablet & Capsule Process Development
Training Course**

**LET INDUSTRY EXPERTS
TRAIN YOU**

Learn best practices for evaluation of raw materials, and the scientific process in formulation development, all while ensuring proper scale-up in tablet and capsule manufacturing.

TABLET & CAPSULES

COURSE OVERVIEW

This course provides comprehensive insight into The Manufacturing Process of tablet and capsule production and will provide powerful tools that you can put to work immediately. Whether you are new to the industry or want additional functional knowledge, our course consists of a well-balanced combination of presentations, group discussions, Q&A sessions, and live demonstrations with hands-on exercises—resulting in a much more valuable experience. During the training, you will enhance your knowledge of proper excipient selection for direct compression, capsule filling and all granulation methods. Attendees will also learn all of the key unit operation equipment for set-up, operation and maintenance. With our help, your company can effectively reduce downtime and increase productivity.

LEARNING OBJECTIVES

Participants of this training course will finish with an understanding of these concepts:

- Identify root causes of Tablet & Capsule manufacturing and Scale-up challenges
- Direct compression, Dry & Wet Granulations techniques
- Expert insight on tableting and encapsulation processes
- Formulation development and troubleshooting process
- Optimized tablet design, steel types, coatings and maintenance

WHO SHOULD ATTEND?

Professional in the tablet and capsule development, scale up and manufacturing departments:

- Formulation Scientists
- Engineering
- Operators / Technicians
- Quality Control
- Supervisors & Production
- Administration

HANDS-ON TRAINING SEMINAR

Natoli Scientific 100 Emlen Way Ste. 104-108, Telford, PA 18969 P: (636) 926-8900

SEATING IS LIMITED

Ask us about group discounts

COURSE FEE: \$2,995

EARLY BIRD SPECIAL: \$2,695

Register online! | natoli.com/trainings

COURSE OVERVIEW

LECTURE TOPICS

ROBERT SEDLOCK

- Powder Preparation & Micromeritics
- Rotary Tablet Press Operations
- USP<1062> Regulatory Compliance Guidance

BILL TURNER

- Tooling Fundamentals Specifications, Troubleshooting
- TabletCAD® Demonstration

JOHN CIASULLI

- Milling Technologies

RAHUL HAWARE

- Events involved in the Journey of Powder to Tablet Compaction
- Methodologies for Evaluating Compression Events (Heckel Equation and Work Descriptors)

TONY CARPANZANO

- Excipient Functionality & Selection

AL FRIEDRICH

- Blending operations and efficiencies

LUNCH & LEARN LIVE DEMO

MICHAEL RUCH

- TaBlitz AI-powered tablet design software

LAB SESSIONS

ROBERT SEDLOCK

- Rotary Press Operation
- Compaction Studies
- Characterization Studies & Scale-up
- Dry Granulation
- Hands-on Roller Compaction Process
- Micromeritics

JOHN CIASULLI

- Milling Technologies

JOHN STURGIS

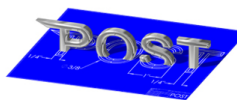
- Wet Granulation Processes
- Compaction Emulation
- Single Station Material Characterization Studies
- USP<1062> Regulatory Compliance Guidance

HANDS-ON UNIT OPERATIONS

- Dry granulation roller compaction
- Wet granulation high shear and fluid bed
- Milling operations
- Single station, rotary, and compaction simulation (direct)



In Partnership:



Register online! | natoli.com/trainings

COURSE SCHEDULE

DAY ONE:

| | | | |
|--------------|---|---------------|--|
| 9:00 | Introductions | 11:00 - 11:15 | Break |
| 9:30 - 11:00 | Robert Sedlock - Powder Micromeritics & Rotary Tablet Press Compaction Process | 11:30 - 12:30 | Bill Turner - Tooling Fundamentals, Specifications, Troubleshooting |
| | | 12:30 - 1:30 | Lunch & TaBlitz Demonstration |

| Lab Session | 1:30 - 2:30 | 2:30 - 3:30 | 3:30 - 4:30 |
|-------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Group 1 | Micromeritics/ Powder Rheology | Rotary Press Operations | Wet Granulation |
| Group 2 | Compaction Emulation/ RD10a | Wet Granulation | Micromeritics/ Powder Rheology |
| Group 3 | Wet Granulation | Micromeritics/ Powder Rheology | Compaction Emulation/ RD10a |

DAY TWO:

| | | | |
|---------------|---|---------------|---|
| 9:00 - 10:00 | Rahul Haware - Wet Granulation Processes | 11:30 - 12:30 | John Ciasulli - Milling Technology |
| 10:00 - 11:00 | Rahul Haware - Dry Granulation, Roller Compaction Technologies | 12:30 - 1:30 | Lunch & Learn with Michael Ruch - TaBlitz AI-powered design software |
| 11:15 - 11:30 | Break | 1:30 | Group Photo |

| Lab Session | 1:30 - 2:30 | 2:30 - 3:30 | 3:30 - 4:30 |
|-------------|---|---|---|
| Group 1 | Dry Granulation / Milling Technologies | Encapsulation | Compaction Emulation/ RD10a |
| Group 2 | Rotary Press Operations | Dry Granulation / Milling Technologies | Encapsulation |
| Group 3 | Encapsulation | Rotary Press Operations | Dry Granulation / Milling Technologies |

DAY THREE:

| | | | |
|--------------|--|---------------|--|
| 9:00 - 9:45 | Randy Jung - Encapsulation Process | 11:00 - 12:30 | Tony Carpanzano - Excipient Functionality & Selection |
| 9:45 - 11:00 | Rahul Haware - Methodologies for Evaluating Powder Compaction | 12:30 - 1:00 | Q&A Final Remarks - Lunch |

FEATURED EXPERT INSTRUCTORS

Our instructors are trained in best practices of pharmaceutical formulation for tableting and utilize a quality by design (qbd) strategic process for product purity and efficacy.



ROBERT SEDLOCK NATOLI SCIENTIFIC

Robert Sedlock is the Director of Natoli Scientific and brings over 25 years of industry experience. Robert's earlier career spans strain gage technology and data acquisition systems. When joining Natoli Engineering Company in 2015, Robert worked with the industrial pharmacy graduate students at Natoli Institute / Long Island University, AMS school of Pharmacy in Brooklyn, NY. This initiative brought in industry contract laboratory projects and developed the solid dosage manufacturing process training program. In 2018 Robert opened the Natoli Scientific, Telford, PA facility which is now a 14,000 square foot facility that offers solid dosage training programs, contract research and development projects from pre-formulation to formulation development and start-up manufacturing GMP services. Robert is an invited speaker at many universities worldwide and has published many technical articles and peer-reviewed research papers.



DR. RAHUL HAWARE

Dr. Haware is a Pharmaceutical Scientist currently serving as the Director of Scientific Support and New Business Development at Natoli Scientific. His professional and academic expertise is in leveraging Process Analytical Technology (PAT), and Quality-by-Design (QbD) paradigms to develop the DM(3) approach. He was a professor for eight years and has authored several book chapters (3) and peer-reviewed international review and research papers (46). Dr. Haware holds Master's degrees in Pharmacy and Molecular Biology. He completed his PhD in Powder Compaction Physics at UiT The Arctic University of Norway.



JOHN CIASULLI

Mr. Ciasulli is the VP of Sales / GM for Frewitt USA, Inc. He has always possessed a strong mechanical aptitude which came in handy when he started his first of many summers working at his father's auto repair shop at the age of 15. Through his various positions at top-end capital equipment companies, he has been involved in powder milling and complete process equipment selection since 1990. He has extensive hands-on experience in lab trials, machine selection, field start-up, trouble shooting and optimization.



WILLIAM (BILL) TURNER

Mr. Turner has been with Natoli Engineering for over 43 years, starting at a young age of 21. He is currently the Technical Service Manager for Tooling and Tablets. Prior to that position, he was the Engineering Manager and tablet and tool designer for over 20 years, as well as a Technical Customer Service Representative for 20+ years. He educates, trains, and assists Natoli sales and service staff. He leverages these decades of experience into in-house and on-site seminars to the industry in these same topics.



GARY T. NORMAN TECHNICAL MANAGER - DFE PHARMA

Gary began his career as a scientist with Sterling Winthrop (Sanofi Synthelabo) back in 1986. At Sterling Winthrop Gary was mainly involved with formulation development of tablets & capsules (soft & hard). This evolved into evaluating the physico-mechanical properties of API's and excipients, using compaction simulators and physical testing machines. Gary then moved onto Pfizer, Sandwich, UK still within the OSD formulation area. After Pfizer Gary moved over to British Biotech which involved the co-ordination of the contract manufacture of soft gel formulations.



In 1999, he moved over to the US initially with Fuisz Technologies (Biovail) in Virginia, working in the formulation of orally disintegrating tablets. He then became Technical manager at SPI Pharma in New Castle, Delaware where he developed co-processed excipient platforms such as Pharmaburst. In 2007 he moved back to the UK & became a product development manager at Encap Drug delivery (Capsugel/Lonza) in Scotland for over 3 years. After a short while with Sensient colours Gary joined DFE Pharma in early 2013 as Technical Manager EMEA. Since 1st Jan 2023 Gary relocated back to the USA & is currently Technical Manager - North America, based in Charlotte, NC

FEATURED EXPERT INSTRUCTORS



TONY CARPANZANO

Mr. Carpanzano is currently the Director of R&D at JRS Pharma, LP. He has 32 years of experience, with a major focus on advanced solid dosage form and modified-release dosage form development. As a licensed pharmacist, he holds patents on some of these technologies. A licensed pharmacist, Carpanzano's work includes pre-formulation, exploratory development, and clinical manufacturing. He has worked with excipients for companies like Richardson-Vicks, Procter & Gamble, Purdue Pharma and Penwest.



JOHN STURGIS

John Sturgis is a Technical Support Engineer for Natoli Engineering. His current responsibilities include tablet press training, product development training, tablet press calibration & maintenance, compression consulting, and technical sales. John's experience includes pharmaceutical solid dosage production, process scale up, pharmaceutical solid dosage development, data acquisition systems, and tablet press maintenance. John obtained his degree in Mechanical Engineering from Drexel University.



ALBIN FRIEDRICH

Al Friedrich is the GM of Post Material Handling. He has focused on the powder process industry for over 30 years and has a very hands on experience in terms of system integration and process development work including start-up, field service and trouble shooting. He has extensive experience in blending, drying, milling, compaction, separation, agglomeration of powders, primarily in the pharmaceutical can fine chemical industry. His experience also extends to CIP/SIP systems for most process systems. Currently, Al's focus is on bulk material handling system and systems integrations.



MICHAEL RUCH

Michael Ruch is co-founder of TaBlitz. Michael began in mechanical engineering, earning an Associate of Applied Science degree with a focus on design engineering. Starting as a design engineer at Natoli Engineering, Michael advanced by developing software to automate, streamline, and enhance tablet and tool design, leading to the creation of the latest TabletCAD version still in use today. Michael founded DevWorks Automation, specializing in design automation, large-scale engineering integrations, analytics, and AI. In 2021, he co-founded TaBlitz, with a mission to revolutionize tablet design, emphasizing quality, efficiency, and industry impact.



SANDIP TIWARI

Sandip B. Tiwari Ph.D. is Head of Technical Services- Pharma Solutions North America at BASF supporting (Bio)pharmaceutical companies. Prior to joining BASF, Sandip was a Fellow Manufacturing Science & Technology at Teva Pharmaceuticals, Davie FL. Sandip also worked at Colorcon Inc. as a Senior Manager, Global Technology Development focusing on innovation in modified release polymeric systems, and then as a Technical Director. Sandip did his post-doctoral fellowship from Northeastern University, Boston, MA exploring nanotechnology-based biopharmaceutical delivery systems. Sandip also worked for Zydus Cadila in novel drug delivery systems. He earned his PhD in Pharmaceutical Sciences from College of Pharmaceutical Sciences, Manipal, Karnataka, India. He has written one book, nine book chapters/ monographs and contributed more than 100 research publications, abstracts, and patents in the areas of dosage form design, new technologies, mathematical modeling including AI/ ML, dissolution science and excipients.



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COURSE REGISTRATION

TABLET & CAPSULE PROCESS DEVELOPMENT
NATOLI SCIENTIFIC | TELFORD, PA 18969

NOVEMBER 18-20, 2025 | INDIVIDUAL COURSE FEE: \$2,995 PER PERSON

Space is Limited! Early Registration is Recommended!

Name: _____ Job Title: _____

Company: _____

Street Address: _____ City: _____

State: _____ Zip: _____ Country: _____

Phone: _____ Fax: _____ Email: _____

Special Needs and / or dietary requests: _____

How did you learn about this course? _____

4 EASY WAYS TO ENROLL!

1

Register online
[HERE!](#)

2

Complete this form and
mail to: 28 Research Park
Circle, St. Charles, MO
63304 Attn: Training
Coordinator

3

Complete this form
and email the PDF to:
training@natoli.com

4

Complete this form and
fax to: (636) 926-8910
Attn: Training
Coordinator

Payment Methods

Full payment in **US currency** is due no later than two weeks prior to the event. If payment has not been received, a credit card will be required to secure payment for course attendance.

☐ Check - Please make check payable to Natoli Engineering Company ☐ P.O. Number: _____

☐ Credit Card: ☐ Master Card ☐ Visa ☐ American Express

Card Number: _____ Exp. Date: _____ Security Code: _____

HOTEL RESERVATIONS

TABLET & CAPSULE PROCESS DEVELOPMENT TRAINING COURSE

TUESDAY, NOVEMBER 18 THROUGH THURSDAY, NOVEMBER 20, 2025



Book your hotel for Natoli Scientific Training

Courtyard Philadelphia Lansdale

Phone: (215) 412-8686

1737 Sumneytown Pike, Lansdale, PA 19446

[Book your hotel for Natoli Scientific Training](#)

General Information

Event Fees Include: The course fee of \$2,995 per person (\$2,695 per person when registering two or more participants at one time) entitles each attendee to verbal instruction by leading industry experts, written training materials that will be an invaluable resource in the field, and the use of our cutting-edge machinery. Additionally, meals and other refreshments will be available for the entirety of the course. The event culminates with a dinner reception on the evening of the first day. Natoli will present an official certificate of attendance to each trainee to recognize their commitment to the continued development of their industry expertise.

Cancellations/Substitutions: Substitutions will be accepted without penalty if communicated in a timely manner. To receive a full refund, please notify the training coordinator no later than seven business days prior to the course. All cancellations received outside of 7 business days will be subject to a \$125 cancellation fee. However, we understand that life does not always go according to plan. If you are unable to attend, we will apply the remaining funds to the tuition for our next training event.

Course Confirmation: Confirmation of registration will be emailed to participants upon receipt of their form and successful payment. Final course details including a timed agenda, maps and other final course details will be emailed and available for download to all registrants approximately 14 days before the event.

Travel Information: Information regarding discounted hotel accommodations, airport transportation, and more will be sent via email with the course registration confirmation.

Notes: Natoli Engineering Company, Inc. does not anticipate any changes to this course; however, we reserve the right to alter the program and/or speakers without prior notice. In the unlikely event of course cancellation, Natoli's liability is limited to refunding only the course registration fee. Additionally, please note that this course will be taught exclusively in English.