# Influence Of Binder Formulation On Batch Agglomeration

Binder and Polymer Assisted Powder Processing
Multilevel Modeling of Secure Systems in QoP-ML
Simple Chemical Methods for Thin Film Deposition
Handbook of Metal Injection Molding
The Recent Development of New Pigment Binders
Advanced Processing and Manufacturing Technologiesfor Structural and Multifunctional Materials VI, Volume 33, Issue 8
Integrated Pharmaceutics
Injection Molding of Metals and Ceramics
Green Adhesives
Handbook of Pharmaceutical Wet Granulation
Pharmaceutical Excipients
Powder Injection Molding
Pharmaceutical Excipients
Effects of Binder Concentration on the Properties of Plastic-bonded Explosives

Oral Drug Delivery for Modified Release Formulations
Energetic Polymers
Influence of wax-based binder formulations on rheological properties of feedstocks used in low-pressure metal injection
The Influence of Additives on the Physico-mechanical Properties of Binders, Capsules and Tablets
Aulton's Pharmaceutics E-Book
Pharmaceutical Dosage Forms - Tablets
Dosage Forms, Formulation Developments and Regulations
Cosmetic and Toiletry Formulations, Vol. 6
Proceedings of the World Conference on Oilseed Technology and Utilization
Issues in Food Production, Processing, and Preparation: 2013 Edition
Oral Lipid-Based Formulations
Chemistry and Technology of Agrochemical Formulations
Journal of Ferrocement
The Influence of Binders and Pigments Upon the K & N Ink Absorption of Coated Papers
Pharmaceutical Binders and Their Function in Directly Compressed Tablets
Granularity in Materials Science
Handbook of Pharmaceutical Granulation Technology

Materials Design and Applications
Granulation
Hot Embossing
Scientific Bases for the Preparation of Heterogeneous Catalysts
Effect of Binder Ratio on Granule Strength, Dissolution and Structure
כלי יקר
Rejuvenator Influence on Aged Binder Material Properties
Novel Smart Textiles
Handbook of Metal Injection Molding



## RIYA ALEAH

Binder and Polymer Assisted Powder Processing BoD – Books on Demand

A series of plastic-bonded explosives (PBX) has been formulated with more binder than is normally contained in high-energy formulations. Adding a relatively small amount of binder to a material such as PBX 9501 (95/2.5/1.25/1.25 wt % HMX/Estane/BDNPA/BDNPF (the BDNPA and BDNPF form a eutectic that is frequently called simply the eutectic)) was found to decrease the shock sensitivity while not decreasing the energy of the explosive. The best compromise for a PBX

9501-type material contains about 92 wt % HMX. Adding additional binder does not continue to decrease the gap sensitivity of the formulation; however, the energy of the PBX decreases as expected. The higher-binder formulations are of potential use because of the possibility of formulating a PBX with energy similar to TATB formulations, such as PBX 9502 (95/5 wt % TATB/Kel-F 800), and with a higher strain to failure. 2 refs., 4 figs., 1 tab.

*Multilevel Modeling of Secure Systems in QoP-ML*
Elsevier
Binder and Polymer Assisted Powder Processing is an engineering guide to powder-binder-based manufacturing methods. It covers the basic principles, current and emerging practices, implementation, and cost.
*Simple Chemical Methods for Thin Film Deposition*
John Wiley & Sons
Pigment coatings are applied onto paper and paperboard to improve their appearance and printability. For pigmented coatings, pigments and binders are the most important ingredients so their selections are critical. Pigment binders not only perform the basic required role of binding pigment particles to each other and bonding the base sheet, but also significantly influence the rheology, coater runnability, and drying behaviors of the coating formulation and the optical, viscoelastic, and printing properties of coated paper and

paperboard products. When considering the relative amount of binders to use in a coating, one may speak about main binder, co-binder and sole-binder. By sole-binder it is meant that a single binder alone can perform all the desired functions of the binder in a coating. Usually the binder systems consist of a combination of two binders, in which the main binder is responsible for the binding function. Conventional starch is inexpensive, but it is rarely used as a sole binder. Instead, it is mostly used as a co-binder. The main reason is coating solid and viscosity. The highest dry solid for cooked starch is about 42%, but conventional latex is 50%. Eventually, conventional starch lowers the dry solid. Viscosity increase with a large portion of starch is too high for paper coatings. However, biobased latex can be used as a dry form and the viscosity is reduced by crosslinking. As a co-binder, biobased latex was used for offset coating formulations, in which their rheological and water retention properties were investigated. This study provided an interpretation the unknown basic nature of water-swollen starch nanoparticles and their colloidal behaviors scientifically in comparison with conventional latexes. Especially, serum replacement experiments showed that starch latexes are complex systems of particles and a minor fraction of soluble polymers. Conventional

pigments are inexpensive, but they are rarely used in inkjet coating formulations. Instead, silica is commonly used for ink-jet coatings since it provides a large surface area for quick ink absorption. However, silica grades are excluded in modern hybrid printing presses, because it is rather poorly applicable to printing processes except ink jet, so other lower-cost types of coating are being sought to replace the silica grades. Calcium carbonate was replaced partially to silica pigment in an effort to balance coating solids, viscosity. At high solids content, a minimum viscosity was observed in mixtures of different sizes particles, so a high solid inkjet coating was feasible. The incorporation of amine functional polyvinyl alcohol with conventional silica pigments for an ink-jet coating were examined. It was determined that the silica pigment binding strength was improved with the addition of cationic copolymers, which are produced by the hydrolysis of copolymers of vinyl acetate monomer (VAM) and cationic monomers, in comparison to the conventional homopolymers, which are produced by the hydrolysis of polyvinyl acetate, due to the chemical coated paper and ink interactions. However, due to flocculation experienced during the make down and handling of these coatings, it is strongly recommended that coatings be formulated with cationically dispersed silica pigment when

cationic PVOH is used. Generally, the structure as well as chemical differences of coating layers determine the final quality of the inkjet printed image.

*Handbook of Metal Injection Molding* William Andrew

The ultimate goal of drug product development is to design a system that maximizes the therapeutic potential of the drug substance and facilitates its access to patients. Pharmaceutical Dosage Forms: Tablets, Third Edition is a comprehensive resource of the design, formulation, manufacture, and evaluation of the tablet dosage form, an

The Recent Development of New Pigment Binders John Wiley & Sons

Green Adhesives: Preparation, Properties and Applications deals with the fabrication methods, characterization, and applications of green adhesives. It also includes the collective properties of waterborne, bio, and wound-healing green adhesives. Exclusive attention is devoted to discussing the applications of green adhesives in biomedical coatings, food, and industrial applications.

**Advanced Processing and Manufacturing Technologiesfor Structural and Multifunctional Materials VI, Volume 33, Issue 8** John Wiley & Sons

Oral lipid-based formulations are attracting considerable attention due to their capacity to facilitate gastrointestinal

absorption and reduce or eliminate the effect of food on the absorption of poorly water-soluble, lipophilic drugs. Despite the obvious and demonstrated utility of these formulations for addressing a persistent and growing problem *Integrated Pharmaceutics* Springer
ORAL DRUG DELIVERY FOR MODIFIED RELEASE FORMULATIONS Provides pharmaceutical development scientists with a detailed reference guide for the development of MR formulations Oral Drug Delivery for Modified Release Formulations is an up-to-date review of the key aspects of oral absorption from modified-release (MR) dosage forms. This edited volume provides in-depth coverage of the physiological factors that influence drug release and of the design and evaluation of MR formulations. Divided into three sections, the book begins by describing the gastrointestinal tract (GIT) and detailing the conditions and absorption processes occurring in the GIT that determine a formulation's oral bioavailability. The second section explores the design of modified release formulations, covering early drug substance testing, the biopharmaceutics classification system, an array of formulation technologies that can be used for MR dosage forms, and more. The final section focuses on in vitro, in silico, and in vivo evaluation and regulatory considerations for MR formulations. Topics include biorelevant

dissolution testing, preclinical evaluation, and physiologically-based pharmacokinetic modelling (PBPK) of in vivo behaviour. Featuring contributions from leading researchers with expertise in the different aspects of MR formulations, this volume: Provides authoritative coverage of physiology, physicochemical determinants, and in-vitro in-vivo correlation (IVIVC) Explains the different types of MR formulations and defines the key terms used in the field Discusses the present status of MR technologies and identifies current gaps in research Includes a summary of regulatory guidelines from both the US and the EU Shares industrial experiences and perspectives on the evaluation of MR dosage formulations Oral Drug Delivery for Modified Release Formulations is an invaluable reference and guide for researchers, industrial scientists, and graduate students in general areas of drug delivery including pharmaceutics, pharmaceutical sciences, biomedical engineering, polymer and materials science, and chemical and biochemical engineering.

Injection Molding of Metals and Ceramics

Academic Press

Focusing on the application of physical pharmacy, drug design, and drug regulations as they relate to produce effective dosage forms for drug delivery, Integrated Pharmaceutics provides a comprehensive picture of pharmaceutical product design, describing the science and art behind

the concepts of dosage form development. Combining physical pharmacy, product design, and regulatory affairs issues in a single book, the authors address topics governing drug regulations of United States, European, and Japanese agencies and detail new regulatory guidelines, including quality by design, design space analysis, and blend sample uniformity.

**Green Adhesives** Springer Science & Business Media

Discusses current topics related to the technology and utilization of oilseeds and their products, such as managing an enterprise in a market economy; political and environmental challenges of the 1990s; achieving total quality; nutrition; oilseed harvesting and oil/meal separation; processing of vegetable oils; processing vegetable protein products; oilseeds in animal feeds, etc.

*Handbook of Pharmaceutical Wet Granulation* Springer Nature

From a review of the previous edition: ‘For all the pharmacy students out there part of your pharmacy degree will be to study formulation design and pharmaceutics. This is the holy grail of pharmaceutical technology books. The text reads well and introduces difficult concepts in a more easy-to-understand way, it is definitely worth the money to help you get through the module, if you’re doing a research project in pharmaceutical design then this would

also be an excellent buy...This is essential for passing exams and developing professional competence.' This is the best known text on pharmaceutics. Its strength lies mainly in being a complete course in one book. Reviewers consistently praise its comprehensiveness and its extremely high quality-quality content. Pharmaceutics is one of the most diverse subject areas in pharmaceutical science and an understanding of it is vital for all pharmacists and scientists involved in converting drugs to medicines that can be safely delivered to a patient. The editorial and author team deliver a tour de force of accessibility, coverage and currency in this new edition of a world-class textbook. Relevant chemistry covered throughout Reflects current and future use of biotechnology products throughout Covers ongoing changes in our understanding of biopharmaceutics, certain areas of drug delivery and the significance of the solid state Includes the science of formulation and drug delivery Designed and written for newcomers to the design of dosage forms Key points boxes throughout Summaries at the end of each chapter Fully updated throughout, with particular focus on delivery of biopharmaceuticals, nanotechnology and nanomedicines, parenteral and ocular drug delivery mechanisms. Now comes with online access on

StudentConsult.
Pharmaceutical Excipients
Elsevier
This volume features fundamental research and applications in the field of the design and application of engineering materials, predominantly within the context of mechanical engineering applications. This includes a wide range of materials engineering and technology, including metals, e.g., polymers, composites, and ceramics. Advanced applications would include manufacturing in the new or newer materials, testing methods, multi-scale experimental and computational aspects. This book features fundamental research and applications in the design of engineering materials, predominantly within the context of mechanical engineering applications such as automobile, railway, marine, aerospace, biomedical, pressure vessel technology, and turbine technology. It covers a wide range of materials, including metals, polymers, composites, and ceramics. Advanced applications include the manufacturing of new materials, testing methods, multi-scale experimental and computational aspects. p>
Powder Injection Molding
CRC Press
This book provides an overview of excipients, their functionalities in pharmaceutical dosage forms, regulation, and selection for pharmaceutical products formulation. It includes development, characterization methodology,

applications, and up-to-date advances through the perspectives of excipients developers, users, and regulatory experts. Covers the sources, characterization, and harmonization of excipients: essential information for optimal excipients selection in pharmaceutical development Describes the physico-chemical properties and biological effects of excipients Discusses chemical classes, safety and toxicity, and formulation Addresses recent efforts in the standardization and harmonization of excipients

*Pharmaceutical Excipients*

John Wiley & Sons

This book explores chemical methods for thin film deposition with diverse nanostructured morphology and their applications. Unlike top-down techniques, chemical methods offer low cost, simplicity, and growth of nanostructured surface architecture with ease of small to large-scale area deposition. The book primarily focuses on innovative twelve chemical methods for thin-film deposition on one platform. Since each method has its own advantages and disadvantages, it is crucial to select the specific method for specific material to be deposited depending upon what type of application is targeted. Due to inclusive of diverse chemical deposition methods, researcher will have knowledge about best choice of the deposition method to be adopted. Inclusive methods discussed in the book are

chemical bath deposition, successive ionic layer adsorption and reaction, ion exchange, electroless deposition, electrodeposition, hydrothermal, spray pyrolysis, spin coating, dip coating, doctor blade, screen printing, and sol-gel. The selection of the correct procedure for material to be deposited in thin film form depends on its unique process parameters based on the kind of application and its requirement. The role of preparative factors necessary for thin film alters properties related to structure and surface morphology, electrical conductivity and optical band gap which have been extensively discussed along with the underlying science of film synthesis. The book provides a comprehensive overview of the field of chemical methods for thin film synthesis to applications. In addition to synthesis, the book covers characterization, instrumentation, and industrial application of thin films. As a result, concentrated techniques will be of great interest to university/college professors, students and new engineers as well as postdocs and scientists in the area.

Effects of Binder Concentration on the Properties of Plastic-bonded Explosives John Wiley & Sons

Granular materials are a special topic of recent research and are a milestone of science and technology. These materials are very simple: they are large conglomerations of discrete macroscopic

particles. Granular materials have a broad area of development, which is growing rapidly day by day. Their impact on commercial applications and academia and education is huge. The basic points of this book are the important applications and properties of granular materials. For example, special mention is made of rheological points, shapes, and civil engineering aspects.

**Oral Drug Delivery for Modified Release Formulations** MDPI

The 6th International Symposium on Advanced Processing and Manufacturing Technologies for Structural and Multifunctional Materials and Systems was held in January 2012 during the 36th International Conference and Exposition on Advanced Ceramics and Composites. This symposium examined progress resulting from the research and development of advanced processing and manufacturing technologies for a wide variety of non-oxide and oxide-based structural ceramics, particulate and fiber-reinforced composites, and multifunctional materials. This issue features seventeen of those papers, representing some of the most important developments in processing and manufacturing technologies.

Energetic Polymers The American Oil Chemists Society

Agrochemical products and adjuvants are of vital

importance in agriculture, to protect food and fibre crops from weeds, insect pests and diseases, in order to feed and clothe the growing world population. In recent years there have been increasing pressures to produce agrochemical formulations which have a lower environmental impact and are safer in use. Enormous changes have taken place in the chemistry and technology of agrochemicals over the last twenty years or so and this book provides a timely review of the most important area of technology in the development of new products. This book covers issues around international product quality and safety standards and describes the current and likely future trends which will carry the industry forward into the next millennium. It brings together well known international experts with many years of practical experience from agrochemical companies, consultancies, academic institutions and regulatory bodies. Chemists and technologists involved in developing new or improved agrochemical formulations will find this book an essential reference in the course of their work. The book will also be of interest to those working in research and development departments of raw material suppliers, as a concise review of this important field.

**Influence of wax-based binder formulations on rheological properties of feedstocks used in low-pressure metal**

**injection** John Wiley & Sons
Issues in Food Production, Processing, and Preparation: 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Brewing Science. The editors have built Issues in Food Production, Processing, and Preparation: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Brewing Science in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Food Production, Processing, and Preparation: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.
The Influence of Additives on the Physico-mechanical Properties of Binders, Capsules and Tablets Elsevier
Metal injection molding combines the most useful characteristics of powder metallurgy and plastic injection molding to facilitate the production of small, complex-shaped

metal components with outstanding mechanical properties. Handbook of Metal Injection Molding, Second Edition provides an authoritative guide to this important technology and its applications. Building upon the success of the first edition, this new edition includes the latest developments in the field and expands upon specific processing technologies. Part one discusses the fundamentals of the metal injection molding process with chapters on topics such as component design, important powder characteristics, compound manufacture, tooling design, molding optimization, debinding, and sintering. Part two provides a detailed review of quality issues, including feedstock characterisation, modeling and simulation, methods to qualify a MIM process, common defects and carbon content control. Special metal injection molding processes are the focus of part three, which provides comprehensive coverage of micro components, two material/two color structures, and porous metal techniques, as well as automation of the MIM process and metal injection molding of large components. Finally, part four explores metal injection molding of particular materials, and has been expanded to include super alloys, carbon steels, precious metals, and aluminum. With its distinguished editor and expert team of international contributors, the Handbook of Metal Injection Molding is an essential guide for all

those involved in the high-volume manufacture of small precision parts, across a wide range of high-tech industries such as microelectronics, biomedical and aerospace engineering. Provides an authoritative guide to metal injection molding and its applications Discusses the fundamentals of the metal injection molding processes and covers topics such as component design, important powder characteristics, compound manufacture, tooling design, molding optimization, debinding, and sintering Comprehensively examines quality issues such as feedstock characterization, modeling and simulation, common defects and carbon content control

Aulton's Pharmaceutics E-Book CRC Press

This book provides an overview of excipients, their functionalities in pharmaceutical dosage forms, regulation, and selection for pharmaceutical products formulation. It includes development, characterization methodology, applications, and up-to-date advances through the perspectives of excipients developers, users, and regulatory experts. Covers the sources, characterization, and harmonization of excipients: essential information for optimal excipients selection in pharmaceutical development Describes the physico-chemical properties and biological effects of excipients Discusses chemical classes, safety and

toxicity, and formulation Addresses recent efforts in the standardization and harmonization of excipients

**Pharmaceutical Dosage Forms - Tablets** ASM International

Dosage Forms, Formulation Developments and Regulations, Volume One in the Recent and Future Trends in Pharmaceutics series, explores aspects of pharmaceutics, with an original approach focused on technology, novelties and future trends in the field. The book discusses the most recent developments in pharmaceutical preformulation and formulation studies, biopharmaceutics and novel pharmaceutical formulations, regulatory affairs, and good manufacturing practices. Exciting areas such as formulation strategies, optimization techniques, the biopharmaceutical classification system, and pharmaceutical aerosols are included. The field of pharmaceutics is highly dynamic and rapidly expanding day-by-day, so it demands a variety of amplified efforts for designing and developing pharmaceutical processes and formulation strategies. This is an essential reference for researchers in academia and industry as well as advanced graduate students in pharmaceutics. - Examines trends and recent technologies in dosage, formulation and regulation - Contains contributions from leading experts in academia, research, industry and regulatory agencies -

Includes high-quality illustrations, flow charts and tables for easy understanding of concepts - Discusses practical examples and research case studies