Updates from the Chair

Multiple stakeholders; **one objective.**

October 4, 2022
Nigel Langley, Ph.D.
Chair, IPEC-Americas

International Pharmaceutical Excipients Council

Collaborative solutions for excipient industry stakeholders

Volunteer Appreciation

- THANK YOU TO OUR MANY VOLUNTEERS!
- SPOTLIGHT ON……

Charlotte McIlvaine
Manager - North America Pharma Quality
Univar Solutions

Federation Update

Federation (Priscilla)

- **IPEC EU**
  - Annual meeting held with EDQM & EMA in May to discuss current regulatory matters including CEPs, CPEs, PDG expansion
    - EDQM interested in CEP survey results & open to further discussion on CPEs!
  - Accepted as observer in EMA TiO2 discussion & will be permitted to comment on forthcoming EMA Q&A
  - IPEC Europe Forum held June 20, celebrated 30th anniversary
- **IPEC Japan**
  - After EI is implemented by JP in Dec. 2022, will review specific HM especially for excipients of natural origin. IJ seeking input for any implementation issues with removal of HM for monographs in EP or USP
  - GMP committee created a template derived from the IF EIP Guide to be used by excipient suppliers to provide info as a basis for virtual supplier audits in Japan
- **IPEC India**
  - Considering transition from Associate to Full member status in Fed.
- **IPEC China**
  - USP held a workshop on nitrosamines

Federation (Priscilla)

- **Federation Projects**
  - Presentation developed for IPEC's Nitrosamines Position Paper and given at a Lhasa webinar; available for member use
  - Regulatory database – arranging demos by Clarivate & Redica to determine feasibility
  - Nomination submitted for Observer status on ICH Q5C Stability WG
  - Participating in EDQM panel discussion on compendial harmonization in Sept
  - Established 3 year review of all IPEC guides & streamlined approval process
  - Initial meeting held on compendial convergence initiative
  - AGM meeting held in June, IA becomes President, IE Vice-President, IJ remains Treasurer

Committees

CRC
(Doug/Jennifer)

- **Monthly Compendial Review Meetings –** Reviewed and discussed postings in PF 48(4), PF 48(5) and PharmEuropa 34.4. Next monthly compendial review WebEx scheduled for Monday, October 10, 2022. Plans to review USP's rewrite of <1059> Excipient Performance and USP Stimuli article on mutagenic impurities in drug products..
- **USP discussions**

  Discussed meeting topics and outcomes from a USP-IPEC-Americas leadership face-to-face meeting held in July 2022.

  Compendial Joint Industry Team – Update from planning committee for the 2022 Joint Industry meeting, covering various pharmacopeial topics (hosted by IPEC-Americas).
- **CPPQ Update** (Compendial Policy Process and Quality stakeholder discussion group) on the group activities, including discussion pertaining to the British Pharmacopoeia pilot program.
- **Mutual Recognition of pharmacopeias –** Kick-off meetings held in July for both US-Europe and US-Asia.
- **Pending article for**
  Prepared and submitted an article entitled "*IPEC-Americas' Perspective: The Value of Participation in Setting Global Quality Standards*" to Tablets and Capsules for their winter edition.

Regulatory Affairs
(Meera/Troy)

- **Presentation from Association for Accessible Medicines (AAM) -** Hosted guests from AAM to share their efforts/thoughts on GDUFA III and Generic Drug initiatives. Discussed ongoing collaboration opportunities between IPEC-Americas and AAM.
- **Reviewed IA comments to FDA Docket** No. FDA-2022-N-1633 with regards to Appendix A of their 2018 Guidance entitled *Abbreviated New Drug Application Submissions - Amendments To Abbreviated New Drug Applications Under Generic Drug User Fee Amendments*
- **Discussed IA review of FDA draft guidance** entitled: *Risk Management Plans to Mitigate the Potential for Drug Shortages*
- **Updated status of international regulatory issues regarding –**
  - EU microplastic restrictions and regulations and their potential to impact medicinal products
  - TiO_2 ban in food uses and potential future impact to pharm.
  - IPEC-Americas efforts to establish a LATAM excipient working group to discuss regional regulator topics related to excipients

GMP
(Mike/Beth)

- **Reviewed status of and progress towards IPEC Guides currently in-progress**
  - Revised IPEC-PQG Excipient GMP guide finalized and approved by Federation. Available exclusively to IPEC and PQG members for a three-month period
  - First draft of IPEC-Americas GMP "How to" Audit guide to the NSF/IPEC/ANSI 363 Good Manufacturing Practices (GMP) for Pharmaceutical Excipients Standard, to be available to members soon.
  - Finalizing comment on revision to IPEC Excipient Stability Guide
- **Shared EXCiPACT® board** is looking for an IPEC-Americas representative with experiencing in marketing to help grow the program
- **Discussed** team progress in reviewing/commenting on USP PF48(4) proposed revisions to <1078> Good Manufacturing Practices for Bulk Pharmaceutical Excipient.

Excipient Qualification (Ann/Candy)

- **Certificate of Analysis Guide Revision** – Guide currently with Federation for final approval. Webinar (free to IPEC members) to review/highlight changes is being planned for Nov 4.
- **Significant Change Guide Revision** – Shared status/activities to revise/update the 2014 IPEC Significant Change Guide to standardize terminology (aligned with Federation recommendations) removed redundancies, update references and incorporate decision trees into the guide narrative.
- **Sustainability and Responsible Sourcing section of the EIP Guide** – updated global team efforts to complete first draft in Q4'2022 and share it more broadly with IPEC members, globally, for review and comment.
- **Discussed potential topics -** to cover during future EQ meetings.

QbD
(Dave/Stacey)

- **Brainstormed –** potential 2023 webinar and publication topics related to QbD/Composition activities.
- **ICH Q13 –** reviewed outcome of IPEC Step 2 comments submitted to ICH Q13 EWG. Shared ICH Q13 Step 3 draft and scheduled WebEx for October 7, 2022 to review and draft comments.
- **PQRI workshop on Co-processed Excipients to Enhance Continuous Manufacturing** – drafted proposal ideas and identified volunteers.
- **Infographic** – Shared recent Excipient Composition infographic, Part 2 covering process aids and additives. Discussed the efforts to develop a third infographics in the series.
- **Shared article** – entitled: *Mitigating the risk from supplier excipient composition variability on drug products/drug product formulations* published in Pharm Tech fall edition

Scientific Affairs
(Lisa/Charlotte)


- **IQ-IPEC-Americas Novel Excipient working group** proposed preparing white-papers and backgrounder documents targeted at decoupling co-processed excipients from the definition of "novel excipient," at least from a "safety" perspective
- **Nitrosamine Cross-Functional Team** – webinar based on the position paper which was given by an IPEC-Americas member at a recent Lhasa nitrosamines workshop.
- **E171 TiO_2 ban in food products in Europe** – reviewed current concerns with the Europe ban for the use of TiO_2 in food products and proposed next steps for pharmaceutical companies.
- **IQ/IPEC E171 Working Group** – plans to publish papers, generate a survey and develop/hold joint workshops
- **Miscellaneous** - discussed topics for future SAC meetings, including the need to enhance engagement/ networking with academia

Users Network (Heather)

User Network committee members reviewed and discussed a couple of topics more applicable to excipient users, which were introduced during other committee meetings, including:

- USP PF 48(5) stimuli article on Mutagenic Impurities and Potentially Mutagenic Impurities in the USP-NF.
- FDA DRAFT Guidance on *Risk Management Plans to Mitigate the Potential for Drug Shortages* which outlines how to develop, maintain, and implement risk management plans (RMPs) to proactively assist in the prevention of human drug product and biological product shortage.
- Announcement from the EU that the revision of *EU GMP Annex 1, Manufacture of Sterile Medicinal Products* was finalized in August of 2022 by the European Commission.

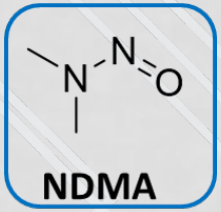
The committee continues to solicit other user specific topics to discuss during future UN committee meetings.

Monthly Compendial Postings Review Team

- Reviewed and discussed postings in PF 48(4) and PharmEuropa 34.4
  - Continue to see fewer postings with impact to excipients
  - Comments being developed for complete rewrite of <1078> GMP for Bulk Pharmaceutical Excipients (GMP committee project)
  - PF48(5) postings will be reviewed during CRC meeting
    - Complete rewrite of <1059> Excipient Performance
- Comments submitted to USP Stimuli Article: *USP's Iterative Approach to Standards Development and the "Emerging Standards"*
  - USP has requested approval to post our comments on the "Emerging Standards" webpage
- Request for round table or advisory panel being developed regarding exception to the policy for including specific EI tests in monographs for naturally derived materials when there is significant data available supporting no risk

Nitrosamines Cross Functional Team

Objective:



Address nitrosamine related concerns with a focus on excipients. Lead, learn from, and leverage expertise in support of driving nitrosamine understanding/risk/mitigations.

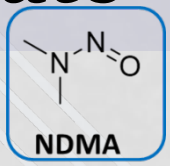
Current Activities:

- IPEC-Federation presentation for nitrosamines was completed
- Webinar on IPEC activities during a Lhasa nitrosamines workshop
- Proposed feedback to FDA regarding a SBIA Generic Drug Forum (March 27, 2022) presentation on Nitrosamine impurities in Human Drug Products by Andre Raw, FDA.
- Shared FDA 2022 Generic Drug Science and Research Initiatives Workshop (May 9, 2022) nitrosamine presentations (nitrites in excipients, analytical methods, safety and risk assessment).

YouTube recordings:
https://www.youtube.com/playlist?list=PLUQMK8dt3D9d5MAJm_dGW8JznEm4Ur-R

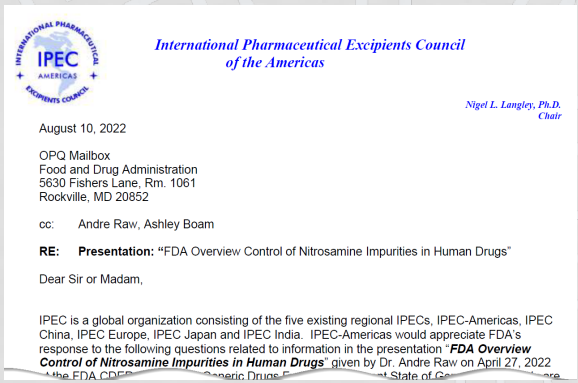
Nitrosamine Cross Functional Team Update

(Q3 2022)



Objective: Address nitrosamine related concerns with a focus on excipients. Lead, learn from, and leverage expertise in support of driving nitrosamine understanding/risk/mitigations.

Submitted letter to FDA requesting clarity on nitrosamine presentation



International Pharmaceutical Excipients Council of the Americas

Nigel L. Langley, Ph.D.
Chair

August 10, 2022

OPQ Mailbox
Food and Drug Administration
5630 Fishers Lane, Rm. 1061
Rockville, MD 20852

cc: Andre Raw, Ashley Boam

RE: Presentation: "FDA Overview Control of Nitrosamine Impurities in Human Drugs"

Dear Sir or Madam,

IPEC is a global organization consisting of the five existing regional IPECs, IPEC-Americas, IPEC China, IPEC Europe, IPEC Japan and IPEC India. IPEC-Americas would appreciate FDA's response to the following questions related to information in the presentation "***FDA Overview Control of Nitrosamine Impurities in Human Drugs***" given by Dr. Andre Raw on April 27, 2022

Response from FDA pending…

Participated in AAPS "Ask Me Anything" expert session on nitrosamines

aaps® American Association of Pharmaceutical Scientists

Advancing Pharmaceutical Sciences, Careers, and Community

AAPS ASK the EXPERTS

Ask Me Anything About Nitrosamine Risk Assessments

The pharmaceutical industry has faced significant challenges in recent years related to the discovery of potentially cancer-causing N-nitrosamine impurities in some pharmaceutical products, leading to several drug recalls and increased regulatory scrutiny. Setting up a nitrosamine risk assessment is a key element of the overall control strategy set forth by regulatory agencies to control for these impurities; however, how to go about doing this is not 100% clear. We have gathered experts from industry to answer your pressing questions regarding how to set up and execute a robust nitrosamine risk assessment from how to identify sources of potential risk, what to look for in a structure of an API or excipient, what tools are available to help with this process, etc. No question is off limits. Please join us on September 12 as we open the discussion. This is your chance to **ask anything!**

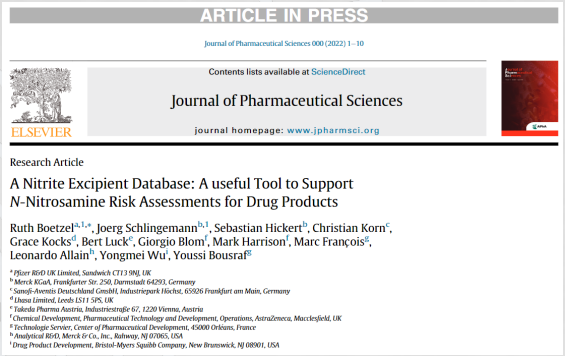
Hosted by the AAPS Pharmaceutical Impurities Community

Live, 1-hour discussion thread in the AAPS Community
Date: September 12, 2022, from 10:00 am–11:00 am ET
Email your questions before the event to axlers@aaps.org.

Excipient questions focused on:

- Responsibility for conducting nitrosamine risk assessment for excipients
- Impact of presence of nitrites in excipients
- Identified root causes of nitrosamine formation in drug products

Recent publication regarding nitrite database



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Journal of Pharmaceutical Sciences 000 (2022) 1–10

Contents lists available at ScienceDirect

Journal of Pharmaceutical Sciences

journal homepage: www.jpharmsci.org

ELSEVIER

Research Article

A Nitrite Excipient Database: A useful Tool to Support *N*-Nitrosamine Risk Assessments for Drug Products

Ruth Boetzel[a,1,*], Joerg Schlingemann[b,1], Sebastian Hickert[b], Christian Korn[c], Grace Kocks[d], Bert Luck[c], Giorgio Blom[f], Mark Harrison[f], Marc François[g], Leonardo Allain[h], Yongmei Wu[i], Youssi Bousraf[g]

[a] Pfizer RSD UK Limited, Sandwich CT13 9NJ, UK
[b] Merck KGaA, Frankfurter Str. 250, Darmstadt 64293, Germany
[c] Sanofi-Aventis Deutschland GmbH, Industriepark Höchst, 65926 Frankfurt am Main, Germany
[d] Ursa Limited, Leeds LS11 5PS, UK
[e] Takeda Pharma Austria, Industriestraße 67, 1220 Vienna, Austria
[f] Chemical Development, Pharmaceutical Technology and Development, Operations, AstraZeneca, Macclesfield, UK
[g] Technologie Servier, Center of Pharmaceutical Development, 45000 Orléans, France
[h] Analytical R&D, Merck & Co., Inc., Rahway, NJ 07065, USA
[i] Drug Product Development, Bristol-Myers Squibb Company, New Brunswick, NJ 08901, USA

Major findings:

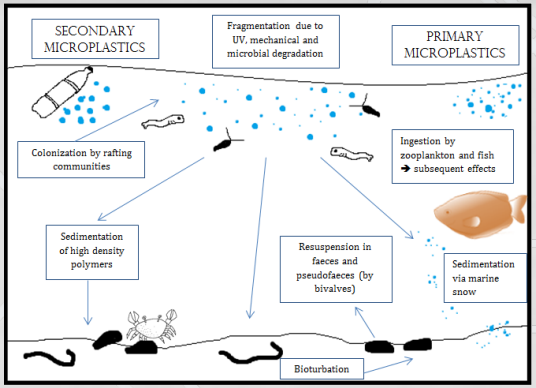
- Average nitrite content and batch to batch variability differ among excipient type
- Differences in nitrite content in batches from different suppliers indicate differences in source materials

Microplastics Cross Functional Team

A cross functional team including members of the Pharma Chemleg team, IPEC-Americas and IPEC- Europe

Current Situation

It is anticipated that the final microplastics regulations will issued by the EU Commission in late 2022/ early 2023.



Current Team Activities

- Focus is to collaborate with CPhI on a workshop
- In discussions with PDA to develop a technical document at some point.
- Both activities still in the discussion stage

IPEC-Americas 2022 Q3 Dashboard

10 interactions with regulators/ pharmacopoeias

	CRC	RA	GMP	EQ	QbD	SAC	UN	LL	XC	IF	EW	M	TOTAL
FDA Docket comments		1											1
FDA Correspondence						2							2
FDA Public Mtg/training													0
USP correspondence/meeting	3			2									5
EDQM comments													0
ECHA (REACH Comments)													0
ICH Comments (ICH Q13 WG)													0
CDE Correspondence													0
NSF			1										1
TGA		1											1
Publications		1			2	1		1	6				10
Workshops		2	2		2						1		7
Webinars/Presentations		5	1	1		6					2		15
Draft Guides (in-progress)			4	3									7
Published New/Revised Guides		1		1									1
Position Papers/White Papers			1			1							2
Infographics					2				2		1	3	8

M = membership

IPEC Foundation

2022 IPEC Foundation Award Winners

Ralph Shangraw Memorial Award – for individuals who have provided outstanding research contributions in the study of excipients or excipient-related technology.

- ***Dr. Mansoor Khan, Texas A&M University Rangel College***

Henk de Jong Industrial Research Award - recognizes individuals working in an industrial setting who have made significant contributions in the field of excipients

- ***Dr. James Wesley, Eli Lilly***

Patrick DeLuca Emerging Researcher Award – Recognizes a beginning career scientist (post Ph.D.) who has demonstrated interest and dedication to the area of excipients

- **Dr. Na Li, *University of Connecticut (2nd year)***

IPEC Foundation (cont.)

- **Graduate Student Award Winners:**
  - Mr. Mustafa Bookwala, Duquesne University
  - Mr. Suraj Fanse, UCONN
  - Mr. Jinghan Li, University of Minnesota
  - Mr. Sichen Song , University of Minnesota
  - Ms. Ruochen Yang, Purdue University

The IPEC Foundation annual awards ceremony will take place at the Grill 23 Restaurant, in Boston Massachusetts, on Sunday, October 16th, 2023!

Strategic Team Updates

Strategic Planning Team 1 Strategic Alliances and Partnerships

Strategic Alliances and Partnerships

- Assessing our partnerships, collaborations and alliances
- Identified potential partners; Prioritized list
- Background information about each organization has been populated. The team is now capturing additional details into each template.

- Formation of a Latin American Working Group - in process.
  - An outreach survey link has been distributed to member company reps. If your company has business operations in Latin America who may want to participate in the working group please let IPEC Staff know.
  - Webinars in conjunction with SAYFBI are in progress for Q4

Strategic Planning Team 2 Expanding Markets and Membership

Expanding Markets and Membership

- The team has identified potential emerging areas which are important for excipients and adjacent markets (see below).
- IPEC should take leadership position and reach out to both the industry and trade organizations to form alliances
- Possible Collaboration between PDA and IPEC-Americas related to Biologic/Parenteral Excipients. Ideas under discussion include:
  - Training in 2023 related to parenterals, lipids
  - A journal article related to excipients & adjuvants
  - Consider a joint technical document with PDA on parenterals including excipients
  - CRS & EW workshop. There is a possibility of a joint workshop partnering with CRS. PDA may be interested in participating as well.

Membership

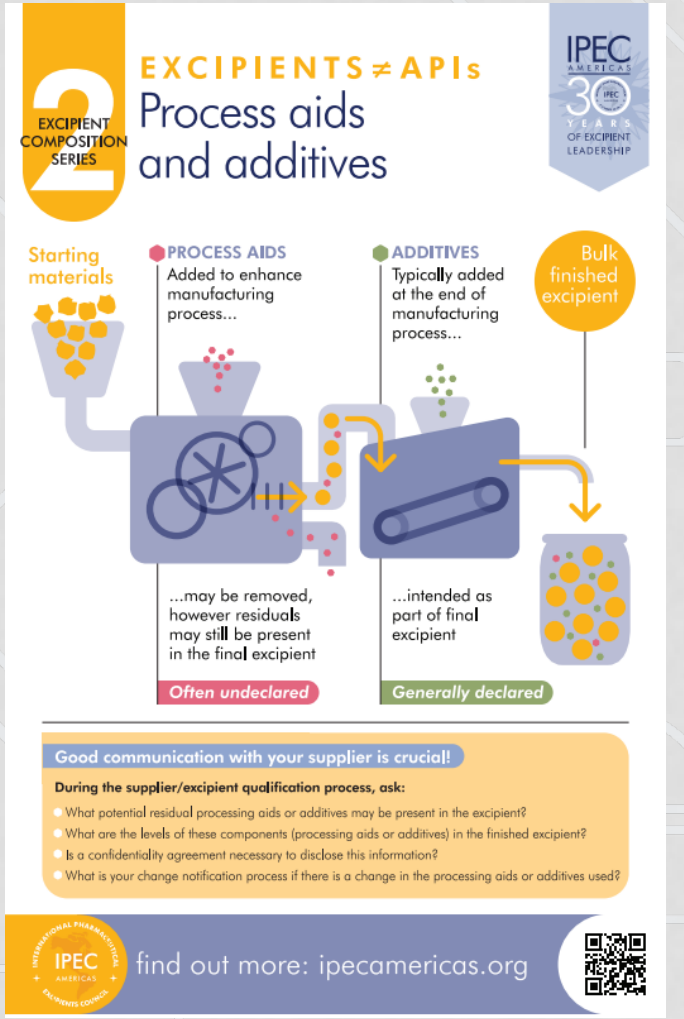
- New members in 2022 include:
  - Greenfield Chemical Company – Joined 5/22
  - Indorama Ventures – Joined 5/22
  - SGS – Joined 6/22
  - Dr. James Polli – University of Maryland School of Pharmacy
  - Clariant – Joined September 2022
- Continued digital advertising using the Feathr platform (example ad below)

- Ongoing trade show presence to stimulate membership:
  - Excipient World Conference & Expo: May 2-4
  - CPhI North America: May 17-19 (Booth and Technical Session)
  - Controlled Release Society Annual Meeting: July 11-16 (Booth and Poster Session)
  - AAPS: October 17-20 (Booth and Foundation Awards)

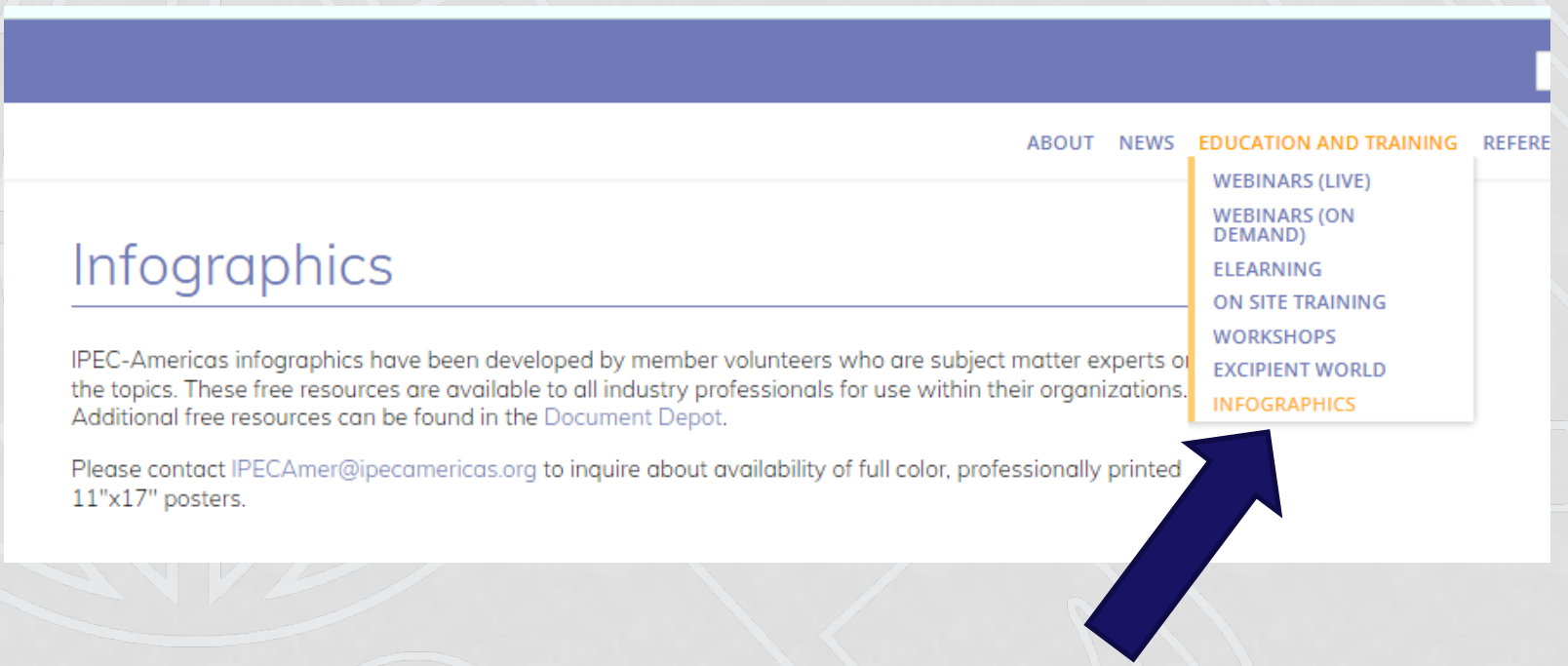
Strategic Planning Team 3 Education

Process Aids and Additives Infographic

- **Purpose:**
  - Define where processing aids and other additives get added into the manufacturing process.
  - Illustrate the potential impact/unintended consequences of undeclared processing aids and other additives.
  - Provide examples of questions users should ask suppliers during the supplier/excipient qualification process.
- **Deliverable:** Infographic
- **Status:** Complete



Infographic Location



Completed infographics available on IPEC-Americas website under Education & Training

Document Depot Video

- **Purpose:** To explain how to navigate the document depot
- **Deliverable:** <1 min video
- **Status:** Complete (located on Document Depot Welcome page)

Excipient World 2023 Video

- **Purpose:** To promote Excipient World participation
- **Deliverable:** 1 min video
- **Status:** Complete (Located on IPEC-Americas website homepage)

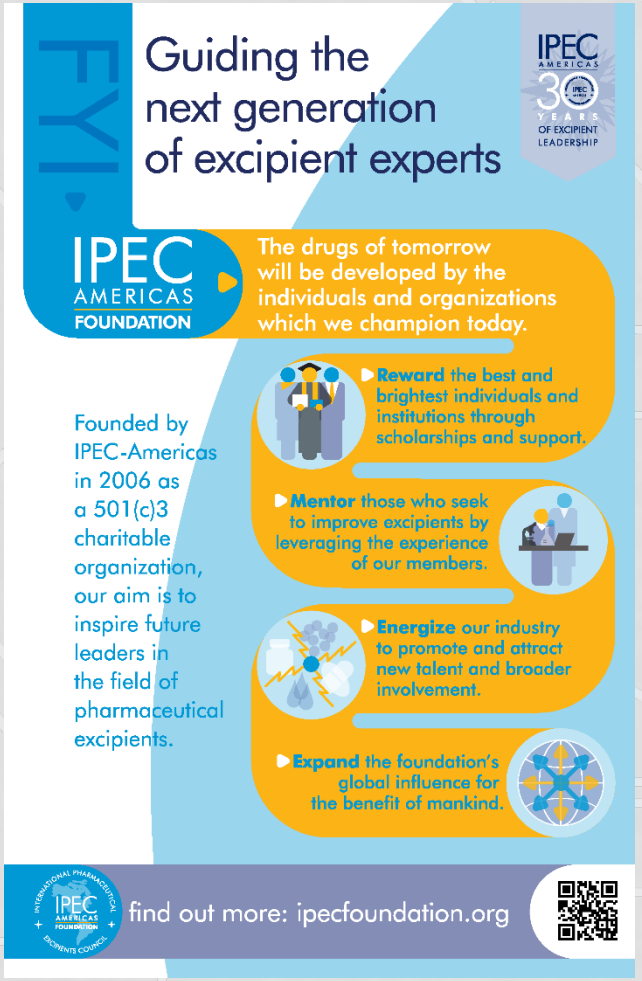
Educational Offering Video

- **Purpose:** To summarize IPEC-Americas various educational offerings
- **Deliverable:** 1 min animated video
- **Status:** Complete (Distribution coming soon!)

IPEC Foundation Video

- **Purpose:** To provide awareness of what the Foundation does and clear information on how academia / industry might get involved.
- **Deliverable:** 1 min animated video
- **Status:** Expected mid-Oct

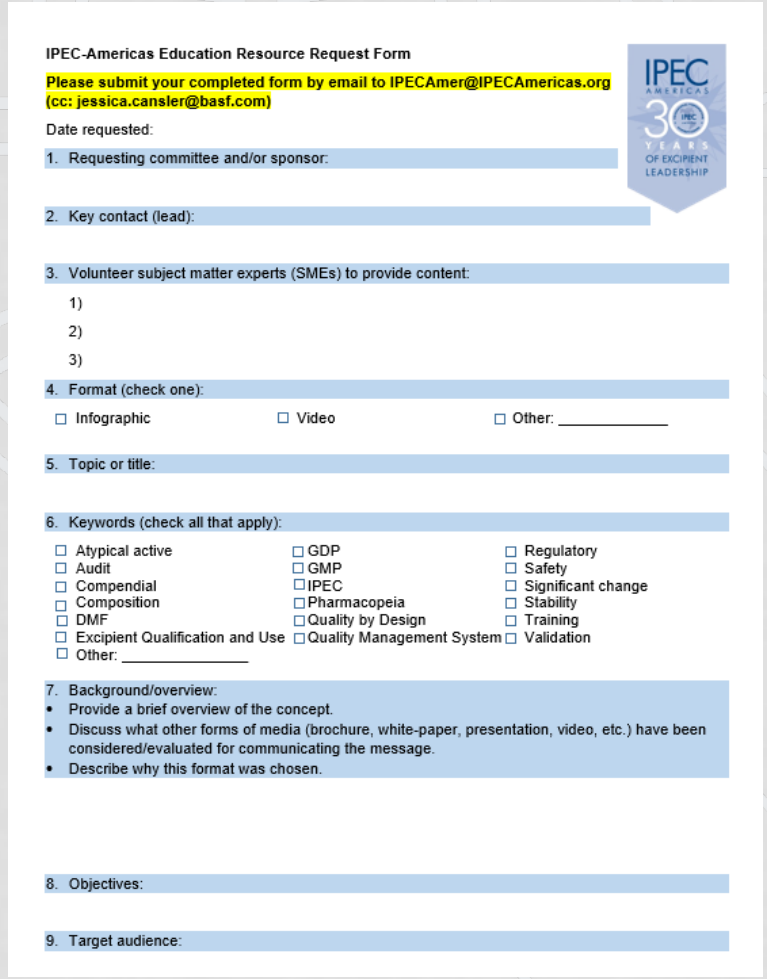
  (in time for Foundation awards)



IPEC-Americas Value Proposition Video

- **Purpose:** To summarize the benefits of membership
- **Deliverable:** 1 min animated video
- **Status:** Expected mid-Oct

Request a Resource



IPEC-Americas Education Resource Request Form

Please submit your completed form by email to IPECAmer@IPECAmericas.org (cc: jessica.cansler@basf.com)

Date requested:

1. Requesting committee and/or sponsor:

2. Key contact (lead):

3. Volunteer subject matter experts (SMEs) to provide content:

   1)

   2)

   3)

4. Format (check one):

☐ Infographic ☐ Video ☐ Other: _____

5. Topic or title:

6. Keywords (check all that apply):

☐ Atypical active	☐ GDP	☐ Regulatory
☐ Audit	☐ GMP	☐ Safety
☐ Compendial	☐ IPEC	☐ Significant change
☐ Composition	☐ Pharmacopeia	☐ Stability
☐ DMF	☐ Quality by Design	☐ Training
☐ Excipient Qualification and Use	☐ Quality Management System	☐ Validation
☐ Other: _____		

7. Background/overview:

- Provide a brief overview of the concept.
- Discuss what other forms of media (brochure, white-paper, presentation, video, etc.) have been considered/evaluated for communicating the message.
- Describe why this format was chosen.

8. Objectives:

9. Target audience:

- Request Form is in the Document Depot
- Resources will be created in order that requests are received (with possible exceptions)
- Turnaround time is estimated to be 8 – 10 weeks
- **NEW:** Keywords have been added to help with searchability of completed items

2022 External Publications

- Trade Press publications
  - **Medicine Maker:** Upcoming series and interviews from Excipient World Event
  - **Tablets and Capsules:** Excipient Issue (Microplastics, Educational Opportunities from IPEC, Continuous Manufacturing, Buying through Distribution)
  - **Pharmaceutical Technology:** Supplier Variability

Excipient Learning Lab

EXCIPIENT LEARNING LAB

- **Webinars**
  - Oct 27: Overview of excipient laws, regs & best practices in Latin America
  - Nov 4: Key revised IPEC Guides: What you need to know
  - Nov 8: Nanoparticles in Excipients: Potential Impact on Patients
- **Workshop**
  - Nov 14-18: IPEC-Americas Excipient GMP Compliance Workshop

Education.IPECAmericas.Org

Excipient World Academy

IPEC-AMERICAS EXCIPIENT WORLD Academy

- **Webinars**

October 5, 11:00 am - 1:00 pm

Covid Vaccines & Beyond - mRNA vaccine future uses and the role of excipient lipid nanoparticles

- Virtual Event (Oct 5 AND Nov 2) $268.50
- Day Pass (Oct 5 ONLY) $179

Topic 1: Delivery of Nucleic Acids using Lipid Nanoparticles
Jay Natarajan
Director, Strategic and Technical Marketing
APAC | Health Care | Nutrition and Care
Evonik (SEA) Pte Ltd

Topic 2: The Evolution of Vaccines Technology
Jennifer Sloan
PSQA BTx Portfolio Lead
Pfizer Global Supply

Topic 3: Novel Lipid Nanoparticle Platform Enables RNA Delivery for Vaccines and Other Applications
Dr. Samuel Clarke
Precision NanoSystems Inc

November 2, 11:00 am - 1:00 pm

3D Printing - Characteristics and limitations of excipients designed specifically for 3D printing

- Virtual Event (Oct 5 AND Nov 2) $268.50
- Day Pass (Nov 2 ONLY) $179

Topic 1: Overview of 3D Printing
Dr. Anna Worsley
Director of Innovation
FabRx Ltd.

Topic 2: Quality Considerations of 3D Printing of Drug Products: ETT Collaborative Approach for Fostering Innovation
Ahmed Zidan, M.S., Ph.D.
Senior Pharmacologist staff fellow
Division of Product Quality Research
Office of Pharmaceutical Quality, CDER, FDA

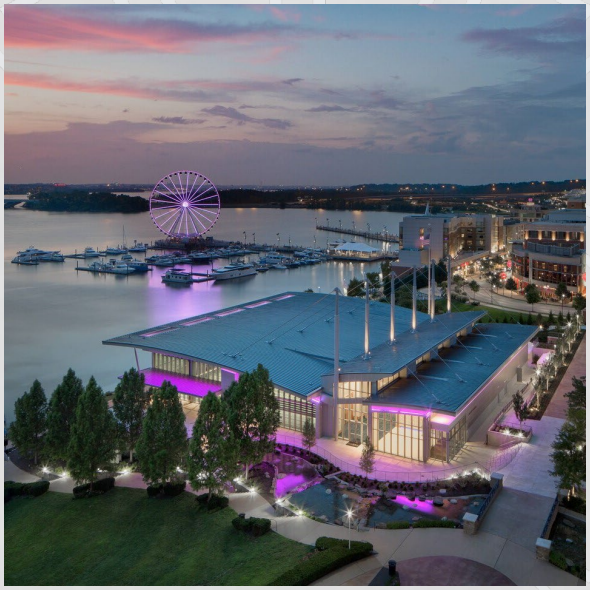
Topic 3: 3D Printing – The Future of Pharmaceutical Manufacturing
Korinde van den Heuvel
Senior Product Developer
DFE pharma

Education.IPECAmericas.Org

Excipient World Conference & Expo

Location & Dates

IPEC-AMERICAS EXCIPIENT WORLD 2023 NATIONAL HARBOR



Workshops: May 1

Conference & Expo: May 2-3

Gaylord National Resort & Convention Center

(National Harbor, MD)

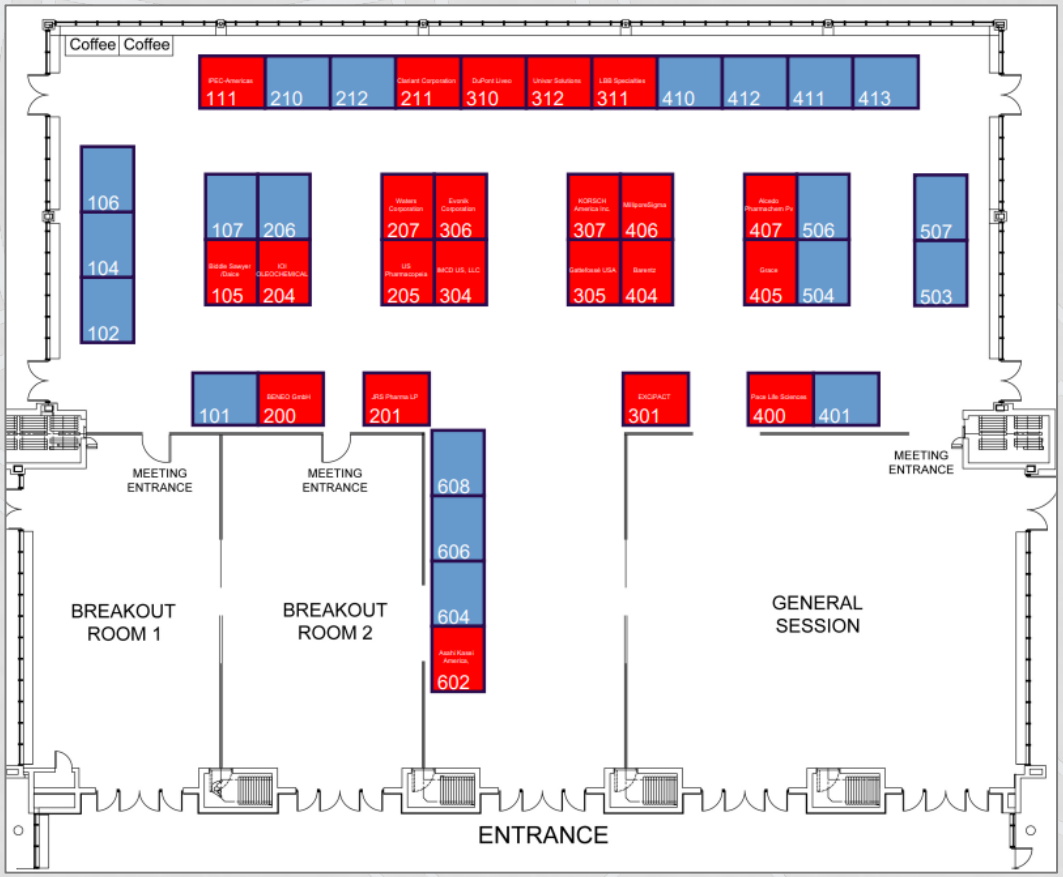
Program

- **Theme:** Innovation in Formulation Science
- **Suggested topics:**
  - Novel excipient development
  - Excipient applications in biopharma
  - Excipients used in parenterals
  - Advancements in processes
- **Abstract Deadline:** Oct. 28

Visit ExcipientWorld.org for more information.

Floorplan

(as of 09/20/22)



	Paid Actives
1	Alcedo Pharmachem Pvt.Ltd.
2	Asahi Kasei America, Inc.
3	BENEO GmbH
4	Biddle Sawyer /Daicel
5	Grace
6	IOI OLEOCHEMICAL
7	IPEC-Americas
8	KORSCH America Inc.
9	LBB Specialties
10	US Pharmacopeia
11	Waters Corporation
12	Barentz
13	Evonik Corporation
14	Gattefossé USA
15	IMCD US Pharma
16	Pace Analytical Life Sciences
17	Univar Solutions
18	DuPont Liveo
19	JRS Pharma LP

	Hold (contract, no payment)
1	Clariant
2	EXCiPACT
3	MilliporeSigma

Visit ExcipientWorld.org for more information.

Dates/Deadlines

- Call for Papers: Sept. 6
- Abstract Deadline: Oct. 28
- Announce Initial Program: Dec. 2
- Open Registration: Jan. 9
- Early Bird / Hotel Deadline: April 10

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Questions?