Carlin Speaks on Excipients’ Role in QbD

Earlier this month, Dr. Brian AC Carlin, Director of Open Innovation for pharmaceutical business at FMC Biopolymer, spoke on a subject about which he is widely recognized as a global expert, Formulation Flexibility and Excipient Functionality in Quality by Design (QbD). The event was the January 14 Philadelphia Pharmaceutical Forum at the William Penn Inn in Fort Washington, PA.

Dr. Carlin chairs the IPEC-Americas Quality by Design Product Development Committee and its Excipient Composition Working Group, posts he has held since 2007, thanks to his employer and IPEC-Americas member, FMC Biopolymer. He also holds an Adjunct Associate Professorship position at the University of Tennessee.

During his presentation, Dr. Carlin described how excipients enable conversion of an active pharmaceutical ingredient (API) into a safe and effective medicinal product. Excipients (and APIs) can be variable, but excipients are often not as well characterized as APIs. This is where QbD is so helpful, Dr. Carlin noted, because it “...requires understanding of all raw material variabilities and their impact on finished product quality.”

In the past, Dr. Carlin, continued, interaction between excipient suppliers and their customers often was limited because of confidentiality concerns. As a result, suppliers often had little knowledge how their material would be used and what would be required of it. At the same time, suppliers’ customers also had limited knowledge about how an excipient was manufactured and the supplier process capabilities.

This is not adequate in today’s world, Dr.
Carlin concluded, because “QbD requires mutual supplier-user understanding.” He continued, by pointing out that:

“QbD encourages development of formulations and processes flexible enough to cope with raw material variability. Adjustments could include quantitative changes in excipient levels as well as process adjustments. Better raw material understanding is obviously necessary for implementation of such adjustments within a quality system. This must include knowledge of the excipient manufacture and Quality Control, especially if continuously produced. Access to supplier data gives better correlation between raw material variability and variability in finished product. Building in formulation flexibility can facilitate QbD and continuous improvement, complementing process flexibility and raw material specification options. Compensatory quantitative adjustments in excipient levels protect against both short-term raw material variability and longer term changes due to material supply or increased Operational Excellence requirements.”

Note to IPEC-Americas Members:

If you or others in your company want to hear more about the role of excipients in the QbD process, maybe you should consider becoming a member of Dr. Carlin’s QbD Product Development Committee. The next meeting is Tuesday, February 23rd in Washington, D.C.

New IPEA Workshop! Pharma Excipient Essentials...For the Non-Technical Professional: From FDA to Formula


For those who are looking for a refresher course or are new to the pharmaceutical industry, Linda Herzog is presenting a workshop which will explore the technical/regulatory basics of the pharmaceutical industry. The two day course will include an introductory background on the main industry regulatory and guidance organizations (FDA and IPEC), key guidance involved, and drug approval processes within FDA. On the second day, the focus will be on excipient types and definitions, formulation basics, and finally, which factors to consider in choosing excipient...
suppliers and distributors.

Who should attend?

- Any employee who is peripherally or directly involved with pharmaceutical technical or regulatory tasks, departments, colleagues, or functions involving pharmaceuticals BUT:
- Does not have a technical / regulatory background him/herself;
- Wants the technical / regulatory basics of the pharmaceutical industry, especially excipients, fast; or
- Wants a refresher of the technical / regulatory basics of pharmaceutical industry, especially excipients, fast; or
- Is new to the pharmaceutical industry

Examples:

Purchasing / Procurement professionals,
New Commercial Hires (Non-technical),
Sales professionals,
Customer service professionals,
Commercial operations professionals,
Mid- to Senior Level Non-technical

Managers

Register now by going to this link: http://www.ipeainc.com/ExcipientEssentialsWorkshop.htm

Future Workshops being planned:

Week of March 22, 2010 (final dates to be announced soon) Arlington, VA location
- Validation (1 day course) Presenter: Dr. Sidney A. Goode
- Excipient Change (1 day course) Presenter: Dr. R. Christian Moreton

June 8-10, 2010 Newark, NJ area
- Excipient GMP Auditing Workshop (3 day course) Presenters: Dr. Art Falk and Dr. Irwin Silverstein

For questions about any workshops, or to reserve a space:
Please contact Valeria Stewart at IPEA, Inc. at 703-351-5266 or email: ipeainc@aol.com

Excipient Auditing Workshop

Excipient Auditing Workshop in Arlington, VA almost full - 1 space is available!
February 9-11, 2010

For the first time, IPEA is offering its three-day Excipient GMP Auditing Workshop at its Arlington, Virginia central office location. This workshop offers participants training in the assessment of excipient manufacturer conformance to appropriate GMP requirements. The workshop leaders are Drs Art Falk and Irwin Silverstein. Registration is currently open and available on line, but hurry –there is only one space left!
Register now by going to this link: http://www.ipeainc.com/auditingworkshop09.htm
Membership Report

During January, IPEC-Americas added two new associate members. One is a chemical distributor, Doe & Ingalls of North Carolina LLC, headquartered in Durham. The other is IPEC-Americas first current graduate student member, Shao Fu, a student at Duquesne University School of Pharmacy in Pittsburgh, PA. Duquesne is where two of IPEC’s three academic associate members teach as Professors of Pharmaceutics, Dr. Moji Adeyeye and Dr. Lawrence Block.

With these additions, IPEC-Americas membership presently stands at 67:

- 42 full members who presently are either manufacturers of pharmaceutical or other excipients or are manufacturers of finished pharmaceutical products containing excipients;
- 1 affiliate member which is a division of a pharmaceutical manufacturing full member; and
- 24 associate members.

The latter group includes members in seven categories, e.g. distributors which have chosen not to seek full member status with voting rights which is their option; suppliers of specialized pharmaceutical development services; individual consultants; publishers of industry journals and magazines; non-profit scientific organizations; academic members who are either current or retired faculty of schools of pharmacy and related sciences; and current graduate students in pharmacy and related sciences. An eighth category of IPEC-Americas associate membership also exists – for industry associations – but this is vacant at the moment.

Associate members are allowed to serve as members of standing committees and working groups, as well as special committees formed for special purposes, but have no voting rights, nor are they eligible for elective office. They do, however, receive all general membership mailings, newsletters, and bulletins from committees on which they participate as members. This allows IPEC-Americas and its committees to benefit from the talent and services offered by all of its members, not just its full members. For this, IPEC-Americas leadership and staff are very grateful.
Although the May 5-6 ExcipientFest Americas conference at the Ritz Carlton in San Juan, Puerto Rico, is still three months away, some special presentation topics for IPEC-Americas members have already been confirmed. These descriptions are listed below:

**Wednesday, May 5**

- **All day Workshop on Film Coating Technology For Pharmaceutical Applications**
  - Jeff Moore and Gus LaBella of Colorcon

- **IPEC Excipient Composition Guide**
  - Priscilla Zawislak
  - Ashland Aqualon Food Ingredients

- **The IPEC New Excipient Safety Evaluation Procedure**
  - Christopher DeMerlis
  - Colorcon

- **The IPEC Excipient Stability Program Guide**
  - Dr. Philip Merrell
  - Jost Chemical Company

- **Future Excipients – Their Need, Discovery & Regulatory Journey to Market**
  - Dr. Ranga Velagaleti
  - BASF and Dr. Sherry Ku
  - Pfizer/Wyeth

- **Conforming to the IPEC CoA Guide**
  - David Klug
  - sanofi-aventis, US

- **Third Party Auditing and Shared Supplier Audits**
  - Eric Berg
  - Amgen, Inc. and Dr. Irwin Silverstein
  - IPEA

- **Orally Disintegrating Tablets**
  - Joseph Zeleznik
  - JRS Pharma
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<tr>
<th>Subject</th>
<th>Speaker</th>
<th>Company/Institution</th>
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<tr>
<td>Best Practices for Assuring Supply Chain Security &amp; Quality Agreements</td>
<td>Dale Carter</td>
<td>JM Huber Engineered Materials and</td>
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<td>Alexa Smith</td>
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<td>QbD – Impact of Excipient Variability on Formulation Flexibility and</td>
<td>William Busch</td>
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<td>Excipient Functionality</td>
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<td>Thursday, May 6</td>
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<td>All day Workshop on the Role of Supplier Audits in Supplier Qualification, Supply Chain Security, and Incoming Ingredient Approval</td>
<td>Dr. Irwin Silverstein</td>
<td>IPEA, Inc.</td>
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<td>The Future of Co-Processed Excipients</td>
<td>Dr. Brian Carlin</td>
<td>FMC Biopolymer</td>
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<td>Change Control in Excipient Manufacturing – It’s Importance In a Quality by Design World</td>
<td>David Schoneker</td>
<td>Colorcon</td>
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<td>Bringing Added Value to the Excipient Supply Chain</td>
<td>Elizabeth Plaza</td>
<td>Pharma Bio Serv and Mutchler Inc.</td>
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<td>Mutchler Inc.</td>
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<td>Excipient DMFs in China</td>
<td>Sun Huimin</td>
<td>NICPB/China</td>
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<td>Excipient GMPs and the Global Certification Project</td>
<td>Dale Carter</td>
<td>JM Huber Engineered Materials</td>
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<td>Solubility Enhancement with Methacrylates</td>
<td>Dr. Abhishek Kathuria</td>
<td>Evonik Polymers</td>
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<td>Commercially Available Options for BCS Class II, III and IV Compounds in all Dosage Forms</td>
<td>Dr. Guido Baumoeller</td>
<td>Cognis</td>
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<td>A Special Speakers Roundtable Moderated By Pharmaceutical Technology</td>
<td>Speakers to be announced shortly-</td>
<td>Expected to include invited FDA, USP</td>
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<td>And industry speakers</td>
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FDA News - CDRH Gets New Director

Jeffrey E. Shuren, MD., J.D., who had served as Acting Center Director since last September, has been named Director of the Center for Devices and Radiological Health. The center has responsibility for assuring the safety, effectiveness and quality of medical devices; safety of radiation-emitting products; and promoting innovation in devices. Dr. Shuren has been with FDA since 1998 and has served in several public policy and planning positions. These have included associate commissioner for policy and planning, acting deputy commissioner for policy, planning and budget, special counsel to the principal deputy commissioner, and medical officer.

For more information about Dr. Shuren and his FDA history, go to:
http://www.fda.gov/AboutFDA/CentersOffices/ucm193990.htm

More FDA news

As part of the U.S. Food and Drug Administration’s new Transparency Policy program, agency public information changes regularly are posted throughout FDA’s website at http://www.fda.gov

Many of these are now appearing in sections such as/For Industry/, followed by references such as/Data Standards/, /Structured Product Labeling/and others. A recent one, for example, of likely interest to FDA-regulated industry scientists deals with Units of Measure and is found at:

http://www.fda.gov/ForIndustry/DataStandards/StructureProductLabeling/ucm168397.htm

and updates the Unified Code for Units of Measure (ucum).

Member Alert - USP News

January 13, 2010

USP Recalls USP 33-NF 28 and Provides Important Details - On January 9, 2010, the United States Pharmacopeial Convention (USP) initiated a recall of the United States Pharmacopeia 33 and the National Formulary 28 (USP 33-NF 28) because of errors arising from an activity termed Monograph Redesign. Information about the recall and USP’s plans to
reissue the publication are provided in Public Notices that appear at http://www.usp.org/USPNF/recall.html. The USP Board of Trustees has formed a Task Force composed of volunteers, including volunteers drawn from the Council of the Convention, to evaluate the basis for the recall and reissue of USP 33-NF 28.

Approaching Deadlines for Resolution Proposals! - Convention Members are encouraged to submit proposals for resolutions to be considered at the April 21-24, 2010 Membership Meeting. Proposals received by January 15, 2010 will be considered for the Preliminary Report of the Resolutions Committee, which will be posted online in advance of the 2010 Convention. March 22, 2010 is the final deadline for resolution proposals for consideration by the Resolutions Committee (RC) for possible inclusion in a supplemental Committee report. For more information and to access the online submission form, go to http://www.usp.org/audiences/volunteers/members/private/resolutions/callFor2010Resolutions.html.

Applications Being Accepted for 2010 Internship Program - The USP Summer Internship Program offers students of chemistry, pharmaceutical sciences, and related science disciplines the opportunity to spend 12 weeks at USP working on defined projects in the following areas:
- Quality of Manufactured Medicines-Assist in developing and validating monograph procedures in USP's Applied Research and Development Laboratory
- Quality of Food Ingredients and Dietary Supplements-Develop analytical procedures for use in standards in the Food Chemical Codex and/or the USP-NF
- Global Public Health-Compare mini-lab technology to compendial procedures for the detection of substandard and counterfeit medicines
- Public Health Policy-Work on substantive health policy issues related to USP's standards setting activities

The application deadline is February 26, 2010. For more details, go to http://www.usp.org/aboutUSP/careers/internship.html.

USP Requests Candidates for Expert Committee Membership Reminder

As a follow-up to a message forwarded earlier this month to IPEC-Americas member representatives, USP is seeking candidates to serve as members of its 20 Expert Committees during the 2010-2015 operating cycle. Committees are active in the areas of Nomenclature, Small Molecules, Biologics...
IPEC–Americas News

and Biotechnology, Excipients, General Chapters, Reference Standards, Compounding, Food Ingredients, and Dietary Supplements.

The Nomenclature and Excipients Expert Committees are of critical importance to IPEC members on a global basis and particularly need participation from persons with expertise in Excipient-related issues. The deadline for Expert Committee member nominations is May 15, 2010. For information on how to apply for committee membership and to recommend a candidate, this is available on the USP website at http://www.usp.org/governance/councilofexperts/callforcandidates.html

KFDA Withdraws Talc DMF Regulation

Sources in South Korea reported that on January 18, 2010 KFDA authorities officially withdrew their draft guideline which would have added Talc to the list of substances subject to drug master file (DMF) registration.

Reportedly, KFDA decided that since no DMF guideline or requirement related to components or excipients such as Talc existed in other countries, a Korean requirement might cause trade conflicts with other countries. KFDA also recognized, sources said, that current quality control practices would be sufficient to guarantee Talc quality because available analytical methods are able to identify asbestos contamination. Instead of requiring a DMF as part of its new product registration process, KFDA will review a supplier’s Certificate of Analysis (CoA). This will require sponsors who use Talc in the finished drug to submit CoAs for talc with their new product application. With respect to existing products containing talc that are imported, CoAs will be reviewed in advance of importation and again prior to customs clearance.

When the new process will begin is uncertain. Detailed guidance from KFDA, however, is expected beforehand.

34th Annual Georgia GMP Conference Has Outstanding Program

As noted below in the list of upcoming industry meetings, there still is about a month left to get the early registration discount to attend this year’s conference – one of the Food and Drug Administration’s favorite meetings in which to participate. This year’s program is no exception, as it features eleven current FDA spokespersons, two of whom will be speaking twice, and at least three retired agency officials, one of
whom is Peter Barton Hutt, Esq., former chief FDA counsel.

For a complete list of speakers and to review the complete three day conference program, go to www.InternationalGMP.com and click on Agenda.

IPEC-Americas also has several speakers on the program, which should help to make attendance attractive to member company personnel. For example, on Tuesday, March 16, following Mr. Hutt’s keynote address, IPEC-Americas Chair-Elect Dale Carter of JM Huber will square off with Edwin Rivera Martinez of FDA to discuss Supply Chain Control. Following them Martin Van Trieste of Amgen will review the Rx-360 consortium’s plan to share supplier audit reports as a means to further tighten the pharmaceutical supply chain.

That afternoon Cynthia Culmo of Abbott Laboratories will chair a two part session on the Regulatory Structure of Dietary Supplements followed by an examination of Pharmaceutical Risk Management issues. In the second segment another Abbott spokesperson, Zena Kaufman will speak.

On March 17, Dr. Maria Jacobs of Pfizer, will moderate the morning session. This is devoted to current international updates. Speaking in this session are Rick Friedman of FDA, Tor Graberg of the Swedish Medical Projects Agency, Robert Scales of Health Canada, an FDA International Programs Officer, and Dr. Sabine Kopp of the World Health Organization.

A third Abbott employee, Ballard Graham, will moderate the March 17 afternoon session which will discuss current FDA regulatory issues involving generic drugs, case studies of criminal investigations and biologic field regulations. During this session Leslie Bloom of Pfizer also will discuss quality by design from our industry point of view.

The closing session on Thursday morning, March 18, will be all FDA, including the moderator, Barbara Wood of the Atlanta District Office of the ORA Fields Operations division. Compliance updates will be provided from CBER (speaker to be announced); CDER – Edwin Rivera Martinez; ORA Investigations – Ilene Pettit; and ORA Compliance – Phil Campbell.

And if that’s not enough, here’s one more reason to go to the Georgia conference: For every two paid registrations from the same company, the third registration is FREE!

See Ya!
Important Industry Meetings

February 2-5

AAPS Workshop
45th Annual Pharmaceutical Technologies Arden Conference:
Formulation Strategies for Poorly Soluble Drugs
The Thayer Hotel
West Point, NY
Register: www.aapspharmaceutica.com/ardenconference

February 16-19

SOCMA’s Informex
Moscone Convention Center
San Francisco, CA
Register: www.informex.com/socma

February 22-25

International Conference on Drug Development – 50th Anniversary
The Changing Healthcare Environment: Challenges & Opportunities for FDA, Industry & Academia
Barton Creek Conference Center
Austin, Texas
Register: www.utexas.edu/pharmacy/ce

February 23-25

Personal Care Products Council 2010 Annual Meeting
Boca Raton Resort & Club
Boca Raton, FL
Register: www.personalcarecouncil.org

March 11 – 13

CHPA – Consumer Healthcare Products Association
Annual Executive Conference
The Fairmont Turnberry Isle Resort & Club
Aventura, Florida
Register: http://www.chpa-info.org/meetings/AEC.aspx

March 15 – 18

34th Annual Georgia GMP Conference
Spotlighting Risk Management –
University of Georgia Center, Athens, Georgia
Register: http://www.IntrnationalGMP.com
**March 15 – 19**

PDA Annual General Meeting  
Gaylord Palms Resort and Convention Center  
Kissimmee, Florida  
Register: http://www.pda.org/

**March 21 – 25**

American Chemical Society  
National Meeting & Exposition  
San Francisco, California  
Register: http://portal.acs.org/portal/acs/corg/content

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**IPEC-Americas Committee Meetings**

**February 22**  
*Executive Committee* (by invitation only)  
9:00 AM – 2:00 PM  
*Marketing Committee* (special)  
2:00 PM – 5:00 PM  
*Joint Dinner*  
5:00 PM – 7:00 PM

**February 23**  
*Quality by Design/ Product Development*  
8:15 AM - 12:00 PM  
-Luncheon –  
12:00 PM  
*Excipient Composition Working Group*  
1:00 PM - 5:00 PM  
*Validation Working Group*  
1:00 PM – 5:00 PM

**February 24**  
*Good Manufacturing Practices*  
8:15 AM – 12:00 PM  
-Luncheon –  
12:00 PM  
*Excipient Qualification*  
1:00 PM – 5:00 PM

**General Update**  
5:30 PM – 8:30 PM  
**February 25**  
*Compendial Review/Harmonization*  
8:15AM – 12:00PM  
-Luncheon-  
12:00 PM

**Regulatory Affairs**  
1:00 PM – 5:00PM

Reminder: All committee and working group meetings are held in the offices of IPEC-Americas outside legal counsel, Buchanan Ingersoll & Rooney PC, 1700 K Street, Suite 300, N.W., Washington, D.C. Since the building is security-protected, names of expected meeting attendees must be provided in advance to security personnel. Thus, if you are attending a listed meeting for the first time, please provide your name at least a day before the event by email to jean.rodgers@bipc.com