AAPS ELECTRONIC SCIENTIST

Covering Pharmaceutical Science and Research on the Internet

July 2000

AAPS PharmSciTech

FROM THE EDITOR

AAPS PharmSciTech Volume 1 Issue 1

It is with pleasure that I introduce the newest online journal of the American Association of Pharmaceutical Scientists(AAPS), ***AAPS PharmSciTech.*** The stated goal of the journal is to disseminate scientific and technical information on drug product design, development, evaluation and processing worldwide, taking full advantage of web publishing; this includes the publication of articles with mutimedia features, such as 3D graphics, video, interactive figures and databases and sound. These technological, informational advances will evolve over time but they **will** come to the membership and will be used routinely by the scientific community. ***AAPS PharmSciTech*** will provide an interactive source between industry and academic scientists involved in the development, processing and evaluation of pharmaceutical dosage forms and hopefully will foster and enhance collaborative efforts. ***AAPS PharmSciTech*** should extend the expectations of AAPS, Pharmaceutical Technology Section and the AAPS leadership in providing a premier journal on a global basis dealing with pharmaceutical development and technology. The journal will focus on the basic and applied research of pharmaceutical dosage forms, both traditional and novel, including the emerging area of biopharmaceuticals. It will feature articles of original research, judged by experts for originality and scientific soundness, with no page limitations, and technical notes on limited information. It will also include, generally by invitation, commentaries on topical issues of public and scientific interest, mini. reviews of emerging scientific areas and full reviews of expanding technical areas.

The global interest and support to date has been overwhelming, as is evident from the submission of manuscripts from academe and industry. For everyone this is a new endeavor and experience. It has been a first for most of the scientists who have submitted a manuscript and for those involved in the review process. Like any new learning experience, there have been frustrations, but it has been personally rewarding and enjoyable. It is appropriate to introduce some key people at AAPS who are instrumental in bringing this electronic endeavor to fruition. Don Hemenway is Director of Electronic Publishing and Paul Clark is the Manuscript Coordinator. Authors can submit a manuscript electronically via email or they can mail a hard copy or a disk. You are invited to visit the journal's website at **http://www.pharmscitech.com.** To submit a manuscript or for questions, comments, concerns or problems you can contact the Manuscript Coordinator by email at pharmscitech-edoffice@aaps.org or by phone: 703-248-8762.

Being involved in the launch of ***AAPS PharmSciTech*** has been exciting. The extraordinary effort put forth by the AAPS staff, the contributors and the referees has been most appreciated. The reviews have been prompt, thorough and insightful. The contributors to this first issue are deserving of praise for helping to christen this evolutionary event. I would like to pay tribute to the authors by citing their contributions. The research articles in the first issue are:

The Stabilization and Release of Hirudin from Liposomes or Lipid-Assemblies Coated with Hydrophobically Modified Dextran Russell J. Mumper and Allan S. Hoffman

Mumper and Hoffman investigated novel liposomal formulations of hirudin, a peptide used to prevent deep-vein thrombosis following knee and hip replacement surgery. Palmitoyl dextran-coated liposomes were found to stabilize released hirudin and result in greater retention of hirudin's ability to inhibit thrombin.

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Sustained Activity and Release of Leuprolide Acetate from an In Situ Polymeric Implant
Harish B. Ravivarapu, Katie L. Moyer, and Richard L. Dunn

This article describes the preclinical development of an injectable and in situ forming polymeric implant system for effective delivery and activity of leuprolide acetate over a period of 90 days. This product has a potential application in treating hormone dependent carcinomas such as prostate cancer and can be an alternative to the marketed products.

Dynamic Changes in Size Distribution of Emulsion Droplets During Ethyl Acetate-Based Microencapsulation Process Yogita Bahl and Hongkee Sah

This study focuses on the dynamic process of the breakup and formation of emulsion droplets during an ethyl acetate-based emulsion microencapsulation process. The results reported provides invaluable insight into the effect of the onset of ethyl acetate quenching upon the size distribution of poly-d, l-lactide-co-glycolide microspheres.

Novel In Vitro Release Technique for Peptide Containing Biodegradable Microspheres
Janusz W. Kostanski and Patrick P. DeLuca

This paper describes a novel in vitro release method, utilizing a dialysis technique, for peptide-containing biodegradable microspheres that is applicable to testing and in vivo correlation of various microsphere formulations. The method provides an expedient and reliable approach to drug release testing from microspheres, eliminating the need for frequent centrifugations.

Scientists Construct Interactive Molecular Model

Electronic Paper Published in AAPS PharmSci[SM]

Alexandria, VA -- March 28, 2000 – In research published in the American Association of Pharmaceutical Scientists' (AAPS) online journal, AAPS PharmSci[SM], scientists constructed a 3-D model of the protein kinase GRK2, an important regulator of neurotransmitter and hormone receptors.

Because the crystal structure of GRK2 had yet to be determined, the related protein kinase A served as a template for the GRK2 homology model. By docking over 14,000 compounds into the putative active site of GRK2, the researchers identified new lead compounds as inhibitors of GRK2 that could become valuable as research tools or in therapy.

"This paper is breakthrough scientific publishing because it allows the scientist to actually interact with the molecular model in the publication," said Wolfgang Sadée, Ph.D., AAPS PharmSci editor-in-chief and co-author of the study. "The electronic format not only enables the scientist to view the figure in 3-D by rotation and in 256-color, but also to examine detailed structural features of the model."

The paper, entitled "Molecular Modeling of G-Protein Coupled Receptor Kinase 2: Docking and Biochemical Evaluation of Inhibitors," was published in *AAPS PharmSci*, Volume 2, Issue 1. The research paper can be viewed at www.pharmsci.org. The paper's authors include Matthias Kassack, Petra Högger, Daniel Gschwend, Kimihiko Kameyama, Tatsuya Haga, Richard Graul, and Wolfgang Sadée.