



April 2008

Biotech News

- SBE member Dennis Discher and his team advances knowledge of the mechanism by which macrophages, the body's main "policing cells," recognize friend from foe. Knowledge of this mechanism could help scientists turn off rogue macrophages in inflammatory diseases such as atherosclerosis or arthritis.
<http://www.upenn.edu/pennnews/article.php?id=1342>
- Multidisciplinary group of scientists and engineers develop mesoporous silicon particles as a multistage delivery system to help circumvent the body's natural defenses or biobarriers, for improved diagnostic and therapeutic injection of drugs.
<http://publicaffairs.uth.tmc.edu/media/newsreleases/nr2008/nanomedicine.htm>
- Past Keynote Speaker at SBE's 1st International Conference on Biomolecular Engineering, David Baker, and his team design eight enzymes by computer for a reaction for which no enzymes exist, the Kemp elimination reaction (proton transfer from carbon).
<http://uwnews.org/article.asp?articleID=40536>
- Researchers develop a process using a Chesapeake Bay marsh grass bacterium, *S. degradans* enzyme, to break down cellulosic sources into fermentable sugars for biofuels in one single step, and at a significantly lower cost.
<http://www.newsdesk.umd.edu/scitech/release.cfm?ArticleID=1613>

New Services for SBE Members from UTEK

SBE has joined forces with UTEK Corporation, a leading Open Innovation company. UTEK is a full-service provider of innovation services, including innovation strategic consulting, patent analytics, global technology licensing and web-based intellectual property services. The alliance will help create connections between business needs and current scientific research. In particular, UTEK's TekScout helps companies look outside of their internal R&D department to better address the challenge of completing complex development projects. The TekScout Open Innovation Network enables SBE members to post complex needs that must be addressed to successfully complete development projects, in a secure environment on the web. More information will be available on accessing this tool shortly on SBE's website. For more information about UTEK, please visit its website at <http://www.utecorp.com>.

Accepting Nominations

In memory of Professor Jay Bailey for his many pioneering contributions to biotechnology, SBE's Bailey award is presented to an individual who has had an important impact on bioengineering and whose achievements, either specific or general, have advanced this profession in any of its aspects. Award winners include Michael Shuler of Cornell University, Robert Langer of MIT, Edwin Lightfoot of the University of Wisconsin, Nicholas Peppas of the University of Texas at Austin and George Georgiou at the University of Texas at Austin. You can nominate your colleague by following the instructions at <http://www.aiche.org/SBE/About/Awards.aspx>

SBE Conferences

SBE has extended its call for paper for its **4th International Conference on Bioengineering and Nanotechnology (ICBN)** to May 15, 2008. This Gordon-style conference will be held on July 22-24, 2008 at the University College of Dublin, Ireland. Chaired by Nicholas Abbott at the University of Wisconsin in Madison and Gil Lee at Purdue University, the meeting offers an interesting mix of nanoscale science and bioengineering topics that cover nanosystems for drug delivery, nanomaterials for cellular engineering and nanotools for bioengineering. Keynote speakers include professors Jeff Hubbell, director of the Institute for Biomedical Engineering of the ETH and the University of Zurich, Switzerland, Jerome Bibette at the Colloids and Divided Materials Laboratory at ESPCI, Paris, and Ruth Duncan, of Cardiff University, UK and director of the Centre for Polymer Therapeutics. Professor Duncan's research has transferred six polymer anticancer conjugates into clinical trial and the first 2 polymer-based gamma camera imaging agents. Support for students will be available. Find out more at <http://www.aiche.org/icbn>.

You may also want to save the following dates. SBE is once again organizing its **2nd International Conference on Biomolecular Engineering**. Ryan Gil of the University of Colorado and Sachdev Sidhu of the University of Toronto are chairing the event. The date and location are January 18-22, 2009 in Santa Barbara, CA. Go to <http://www.aiche.org/ICBE> to find out more.

Co-chairs Bob Adamson of Wyeth and Chuck Goochee of Johnson and Johnson are planning the second International Conference on Accelerating Biopharmaceutical Development. The conference will take place at the newly renovated Marriott Coronado Island Resort on March 7-10, 2009. More details on both upcoming conferences for next year will be available shortly.

Join Now

Not a current SBE member? It's never too late to join or renew. Costs are \$75 for regular members, \$25 for graduate students, \$10 for AIChE, ACS and IBE members, or \$5 for undergraduates. Join now at <https://www.aiche.org/apps/ecommerce/bio/index.asp>.

Member benefits include:

- Subscription to SBE's semi-annual BioSupplement to Chemical Engineering Progress.
- Discounts on leading biological engineering conferences including SBE and SBE cosponsored meetings and courses.
- Access to online membership directory.
- A voice in education, employment and technology advancement topics.

Comments?

SBE's e-Connections is edited by Adrian Andrew Fay, Web Science Editor, with input from SBE staff. Contact us at bio@aiiche.org

*The Society for Biological Engineering (SBE) is a new technological community of AIChE
Its mission is to promote the integration of biology with engineering and realize its benefits
through bioprocessing, biomedical, and biomolecular applications.
For comments and contributions to SBE Connections, email <mailto:bio@aiiche.org>*

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