



October 2006

### Biotech News

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- Chemical Engineers assemble nanocrystals into sheets in a manner similar to that of protein formation. [http://www.umich.edu/~urecord/0607/Oct16\\_06/15.shtml](http://www.umich.edu/~urecord/0607/Oct16_06/15.shtml)
- Scientists discover that protein Lck is key to helping the immune system “remember” pathogens. <http://www.news.wisc.edu/13063.html>
- Scientists measure electron flow in proteins outside of a cellular system, showing how miniature bioreactor cells may be feasible. <http://www.pnl.gov/news/release.asp?id=195>
- Sequencing techniques provide more complete understanding of small RNA's, as shown by the dual role of the AGO4 protein in RNA-directed DNA methylation. <http://www.454.com/news-events/press-releases.asp?display=detail&id=54>
- Biologist finds new compound that disperses biofilms that could leave bacteria more susceptible to disinfectants, antibiotics and immune functions. <http://urel.binghamton.edu/PressReleases/2006/Sep-Oct%2006/biofilm.html>

### SBE's BioSupplement

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This month, SBE is featuring a BioSupplement to Chemical Engineering Progress, with the following feature articles:

***Mother Nature as Both Doctor and Patient*** - Edwin N. Lightfoot, University of Wisconsin

***Bioprocess Development Challenges for Novel Vaccine Production*** - Barry C. Buckland, Merck Research Laboratories.

[Join SBE](#) now to gain access to these articles.

### Bio “X” Engineering Accreditation Criteria

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ABET has approved new criteria for the Accreditation of Chemical and Bio “X” Engineering Programs. The approved criteria are for chemical, biochemical, biomolecular, and similarly named engineering programs, with AICHE as the lead society. The criteria also include new information regarding Biological Engineering. Click [here](#) to view the new criteria.

### SBE at the AICHE Annual Meeting in San Francisco

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A [program book](#) of the bio-related technical sessions is now available. It includes many fascinating talks, including invited international speakers at the US-Japan joint topical conference on medical engineering, drug delivery systems, and therapeutic systems. Other key events include:

**Sunday, November 12th**

- 1 - 3 pm  
Hilton                    **Chem-E-Car Competition**  
SBE Award: Best Biologically Designed Chem-E-Car
- 3 - 5:30 pm  
Hilton  
Continental 4-6        **Industry and Government Leaders Roundtable on the Future of Chemical Engineering.**  
SBE Advisory Board Member Ann Lee of Genentech discusses the most important qualifications for engineers in biotechnology and the future of biological engineering.

### Monday, November 13th

- 6 - 7 pm  
Hilton  
Grand Ballroom A      **SBE's James E. Bailey Award Lecture**  
" Biomedical and Chemical Engineering: Status and Future Directions," Robert Langer (MIT). Co-winners Edwin Lightfoot (U. Wisconsin) and Nicholas Peppas (U.Texas, Austin)
- 9 - 12 pm  
Hilton                    **SBE's Merck Hospitality Suite**  
Free to all SBE members

### Wednesday, November 15th

- 3:15 - 5:45pm  
Hilton  
Grand Ballroom B      **Division 15 Poster Session and Reception**  
Cosponsored by SBE

### Meetings Update

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#### **SBE's 1st Conference on Accelerating Biopharmaceutical Development**

Be a part of a conference that can make your life easier. SBE's Conference on Accelerating Biopharmaceutical development is being held on March 19-22, 2007, in Coronado Island, CA. It focuses on delivering cost-effective, robust processes and methods quickly and efficiently. If you are working on the development and manufacture of biopharmaceuticals such as antibodies, vaccines or therapeutic proteins, you can learn how to improve productivity. Submit an abstract or find out more at <http://www.aiche.org/AcceleratingBio>.

**SAVE THE DATE** SBE is holding its 3rd International Conference on Bioengineering and Nanotechnology (ICBN 2007) on August 12-15, 2007 in Biopolis, Singapore. Find out more at <http://www.aiche.org/icbn>.

### Join SBE

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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 BIOT 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 our online membership directory.
- A voice in education, employment and technology advancement topics.

### Comments?

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