

“Building a Virtually Integrated Life Sciences Company”

KEYNOTE SPEAKER

William A. Goddard, III, PhD

Charles and Mary Ferkel Professor of Chemistry, Materials Science, and Applied Physics
Materials and Process Simulation Center
California Institute of Technology, Pasadena, CA

Current Positions at the California Institute of Technology:

Charles and Mary Ferkel Professor of Chemistry, Materials Science, and Applied Physics

Director of Materials and Process Simulation Center (MSC)

Previous Professional Positions (all at Caltech):

2001-present Charles and Mary Ferkel Professor of Chemistry, Materials Science, Appl. Phys.

1990-present Director of Materials and Process Simulation Center (MSC)

1984-2001 Charles and Mary Ferkel Professor of Chemistry and Applied Physics

1992-1997 Director of NSF Grand Challenge Applications Group at Caltech

1965-1978 Assistant, Associate, and Full Professor of Theoretical Chemistry

1984-1990 Director of NSF Materials Research Group at Caltech

1978-1984 Professor of Chemistry and Applied Physics

Education:

Ph.D. Engineering Science (minor physics), California Institute of Technology, 1965;

B. S. Engineering (Highest Honors), University of California, Los Angeles, 1960.

Awards and Honors:

Awarded National Science Foundation Predoctoral Fellowship (1960-1964)

Awarded Alfred P. Sloan Research Faculty Fellowship (1967-1969)

Awarded Buck-Whitney Medal of NY Section of American Chemical Society (1978)

Elected Member of National Academy of Science (1984)

Elected Member of International Academy of Quantum Molecular Science (1988)

Elected Fellow of American Physical Society (1988)

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December 6, 2008**

Winner American Chemical Society Award for Computers in Chemistry (1988)

Elected Fellow of American Association for the Advancement of Science (1990)

Awarded Richard M. Badger Teaching Prize in Chemistry, Caltech (1995)

Awarded Feynman Prize for Nanotechnology Theory (1999)

Awarded NASA Space Sciences Award (2000)

Awarded Richard Chase Tolman Prize from the Southern California Section of the ACS (2000)

Named one of the 100 most Highly Cited Chemist for 1981 to 1999 (<http://isihighlycited.com>)

Winner 2002 Prize in Computational Nanotechnology Design (Institute for Molecular Manufacturing)

Awarded Honoris Causa Philosophia Doctorem, Chemistry, Uppsala U., Sweden, January 2004

Awarded American Chemical Society Award for Theoretical Chemistry (2007)

Awarded NASA Space Sciences Award for Space Shuttle Sensor (2007)

Elected Fellow of the Royal Society Chemistry (2008)

Other Professional Activities:

Consultant (at various times): General Electric, General Motors, Shell Development, Imperial Chemical Industry, BP, Exxon, Chevron, SOHIO, Dow Chemical, AT&T Bell Labs, Union Carbide, Celanese, Allied Signal, UOP, 3M, Proctor and Gamble, Dow Corning, Nissan, MSI (Accelrys), Schrödinger, Eidogen, Systine

Member, Board of Trustees Gordon Research Conferences 1988-1994

Cofounder of Molecular Simulations Inc. (now named Accelrys) (1984), San Diego CA.

Member Board of Directors (84-95), Chairman Board (84-91)

Cofounder of Schrödinger Inc. (1990), New York City. Member Board of Directors 1990-2000

Cofounder Eidogen Inc (now Eidogen-Sertanty San Diego CA) (2000), Chairman Board of Directors (2000-2005)

Cofounder Systine Inc. Pasadena CA (2001), Chairman Board of Directors 2003-present

Cofounder-Allozyne Inc. (2005), now in Seattle Washington, Member Scientific Advisory Board 2005-present)

Cofounder-GPC-Rx Inc (2008), in Seattle Washington, Member Board of Directors (2008-present)

**Caltech/MIT Enterprise Forum
December 6, 2008**

Current Research Interests:

- New methodology for quantum chemistry, force fields, molecular dynamics, mesoscale dynamics, statistical mechanics
- Applications of atomistic simulations to chemical, biological, and materials systems, including catalysis (homogenous and heterogeneous), polymers, semiconductors, ceramics, and metal alloys
- Protein structure prediction (GPCRs), drug design, incorporation of non-natural amino acids
- Applications of theory to industrial problems in catalysis, polymers, fuel cells, energetic materials, nanoelectronics, and batteries.

Current Research Funding:

National Science Foundation, National Institutes of Health, Department of Energy, Defense Advanced Research Projects Agency, Army Research Office, Office of Naval Research, Environmental Protection Agency, Chevron, Intel Corp., Dow-Corning, Pfizer, Boehringer-Ingelheim, Allozyne.

Research Publications: Over 765, see <http://www.wag.caltech.edu/publications/papers/>
Web site: <http://www.wag.caltech.edu/>

Autobiography of the early period in Goddard's career: "Critical Points and Random Events that Shaped the Early Career of William A. Goddard III" in *J. Phys. Chem. A* 104, 2147 (2000) (the Goddard Festschrift containing articles celebrating Goddard's 60th birthday
<http://pubs3.acs.org/acs/journals/toc.page?incoden=jpcfah&indecade=0&involume=104&inissu=11>)

Scientific Genealogy

- William A. Goddard III obtained his Ph.D. in Engineering Science with a minor in Physics in October 1964 from Prof. Pol Duwez, Professor of Materials Science at Caltech, Pasadena California
- Pol Duwez received his D.Sc. in 1933 from Prof. Emile Henriot, Professor of Physics at U. Brussels in Belgium
- Emile Henriot received his D.Sc. in Physics in 1912 from Prof. Marie Curie at the Sorbonne, Paris, France
- Marie Curie received her D.Sc. in 1903 from Prof. Henri Becquerel at the Ecole Phys. Chim. Ind, (ESPCI) Paris, France
- (Antoine) Henri Becquerel obtained the Engineer's Degree in 1877 from the École des Ponts et Chaussées (Bridges and Highways School; 1874-77) and was Administrator Ponts et Chaussées (1877-1906). He received his PhD from at the Ecole Phys. Chim. Ind, (ESPCI) Paris in 1890 working with Charles Friedel in the laboratory of mineralogy

**Caltech/MIT Enterprise Forum
December 6, 2008**

- Charles Friedel obtained a BS in Strasbourg (1850) and a PhD in chemistry and mineralogy (1869) from the Sorbonne with Adolphe Wurtz. He was Prof. Mineralogy (1876-1884) and Prof. Chemistry (1884-1899) at the Sorbonne He developed Friedel-Crafts chemistry in 1877.
- (Charles) Adolphe Wurtz (1817-1884) MD Strasbourg 1843. Assistant to Jean Baptiste Dumas Ecole Medicine, Paris. (1845-1852). Prof. Organic Chemistry at the Ecole Medicine. He was Founder of the School of Chemistry, Sorbonne.
- Jean Baptiste (Andre) Dumas (1800-1884). Prof. Chemistry Ecole Polytechnique (1835)

CONFIRMED SPEAKERS AND PANELISTS

Danny Levin, MA, PhD, CChem, FRSC

President

Norac Pharma, Azuza, CA

Danny Levin has been President of Norac Pharma since 2007. In his role as President of Norac Pharma he manages all aspects of the business but maintains particular interest in leading process research, process development, process analytical and new product manufacturing for Norac's contract pharma projects. Danny brings 23 years of industrial process R&D and manufacturing experience gained in Europe, Canada, USA and India, working with ICI, Zeneca, AstraZeneca, Avecia, Torcan and NPIL. Danny's academic qualifications comprise 1st class honors Bachelors, Masters and PhD degrees from Cambridge University in the UK. He is widely published in both chemistry literature and patent applications, with over 100 citations to his work and has been recognized with Fellowship of the UK Royal Society of Chemistry. He has also taught synthetic chemistry as Adjunct Professor at Toronto's York University.

Burkhard Jansen, MD

Director, President, CEO & Founder

Novelix Pharmaceuticals, Inc., La Jolla, CA

With over 15 years of experience, Dr. Jansen is internationally recognized for his expertise in the development of targeted cancer and dermatology therapeutics. Prior to co-founding Novelix Pharmaceuticals Inc. and its European affiliate, he was VP, Clinical Development, at Oncogenex, where he brought the company's first lead compound into clinical trials, and built a product pipeline in less than two years. Previously, he worked at the FDA, and was also Head of Experimental Oncology and Molecular Pharmacology at the University of Vienna in Austria. Dr. Jansen played a leading role in the highly successful phase I-II development of Genasense™, which was the subject of one of the most notable transactions in the history of biotech, exceeding \$ 400 million.

Andrew Norris, PhD

Founder

BCN Biosciences, Pasadena, CA

Dr. Andrew J. Norris received his BS in Biochemistry and a minor in Biotechnology from California State University of Fullerton in 1995, and his PhD in Biochemistry at the University of California Los Angeles in 2003 with training in Chemistry and Pharmacology. Andrew has significant experience in the area of Entrepreneurship, working both within the private equity investment community as well as reviewing business plans for various Southern California ventures. In 2002, Dr. Norris, along with

**Caltech/MIT Enterprise Forum
December 6, 2008**

Anderson School of Business graduate Sudip Chakraborty, founded The Midvale Group LLC (TMG). TMG provides consulting services in the areas of healthcare, medical devices, biotech, business services and Business Process Outsourcing (BPO), and is responsible for the founding of BCN Biosciences. Dr. Norris is currently Co-Founder and Director of Research at BCN Biosciences in Pasadena CA. BCN Biosciences is an early phase business enterprise that focuses on developing novel therapeutics for cancer. BCN is currently focusing on the discovery and development of two small molecule therapeutic leads, and one biological therapeutic lead. All of these are currently in the preclinical non-GLP phase of investigation. Dr. Norris possesses a rich personal network of individuals within the healthcare field, ranging from various fields of medicine, biomedical science (pharmaceutical and biotechnology), and technology as well as conventional business.

Richard S. Katzman

Vice President, Academic Affairs
Cedars-Sinai Medical Center, Los Angeles, CA
Acting CEO
Tarrot

Richard Katzman has served as Vice President of Academic Affairs at Cedars-Sinai Medical Center since 2002. He has operational responsibility over all academic areas for the Medical Center, including Graduate Medical Education and Continuing Medical Education. He also oversees an academic operating budget totaling \$116 million. In addition, Mr. Katzman has business management and development responsibility over the Cedars-Sinai Technology Transfer Office, which generated \$18 million in revenue in 2004. His responsibilities include working with the technology transfer team to determine the program's strategic direction, facilitating interaction between the Cedars-Sinai research community and the Technology Transfer Office to ensure optimum capture of intellectual property opportunities, and identifying and negotiating business relationships with organizations interested in licensing technology owned by Cedars-Sinai. He also serves as the acting CEO of Tarrot, a new biotechnology venture that operates as a business unit of Cedars-Sinai. Mr. Katzman earned a bachelor's degree in finance from The American University in Washington, DC. He also holds a master's degree in health services administration from the University of Arizona in Tucson.

Brian R. Clark, PhD

Director, Office of Technology Licensing
Beckman Research Institute, City of Hope, Duarte, CA

Dr. Clark and his group are responsible for the identification, protection and commercialization of City of Hope's intellectual property and research partnerships with industry. Dr. Clark obtained his BSc (Hons.) in Biochemistry & Immunology from Strathclyde University, Glasgow. He was awarded a PhD in Experimental Hematology from the University of Manchester, and did two post-doctoral fellowships at the Toronto Hospital and the University of Toronto in Canada, focused on bone marrow transplantation and molecular embryology. After a stint with a NASDAQ-listed biotechnology company, Dr. Clark joined City of Hope's Office of Technology Licensing in 2001. The Office of Technology Licensing currently handles over 500 agreements per year, including: IP licenses; agreements for corporate sponsored research on basic and translational research, and agreements with external partners who seek to access City of Hope's state-of-the-art 20,000 sq.ft. biologics manufacturing facility.

Caltech/MIT Enterprise Forum
December 6, 2008

MODERATOR / PRODUCER

Ira Moskatel

Attorney

Arnold & Porter LLP

Ira D. Moskatel practices law at Arnold & Porter LLP in Los Angeles, where he focuses on Representing businesses that depend on intellectual property or technology, with emphasis in licensing, mergers and acquisitions, joint ventures and strategic alliances. Ira was a founder of Teradata Corporation, a manufacturer of massive parallel database computers (acquired by AT&T several years after a major public offering), and served as a member of the Board of Directors of Peter Norton Computing, Inc., before its acquisition by Symantec. He is a past chair of the Caltech/MIT Enterprise Forum, and has served as Chair of the Law and Technology Section of the Los Angeles County Bar Association. He has lectured and written extensively for major publications on legal aspects of technology, electronic commerce and data security. Ira received a Bachelor of Science in Engineering and Applied Science from the California Institute of Technology, and a J.D. from the University of Southern California Law Center, where he was elected to Order of the Coif and the Board of Editors of the *Southern California Law Review*.

PRODUCER

Rogelio Nochebuena

President

Nochebuena R&D

Nochebuena R&D is a consulting organization based in Pasadena that assists small companies as well as large enterprises to solve problems in a cost-effective way in the fields of lasers and nanotechnology. Mr. Nochebuena has more than 20 years of experience in high technology. He has worked in Fortune 100 companies as well as start-ups. Some of the companies that he has worked for include Agilent Technologies, Xerox Corp., and Carl Zeiss where he served in senior technical and marketing positions. His consulting practice includes clients such as Lawrence Livermore National Labs, Intelligent Optical Systems as well as tier one universities.

SPONSOR



For more than five decades Christie, Parker & Hale (CPH) has rigorously protected the discoveries and inventions of their clients. They have watched Pasadena grow, Southern California blossom, and their own intellectual property practice surge forward to meet new challenges here and abroad.

Unlike general practice firms, CPH's practice is rooted in intellectual property. With breadth and depth of expertise, experience, judgment and creativity, CPH specializes in patents, trademarks, copyrights, trade secrets, unfair competition, plant variety protection, related litigation, and international property rights. The company prides itself on fulfilling all of their clients' intellectual property needs.

In addition to providing services in the patent, trademark, copyright, trade secret, unfair competition, plant variety protection, international intellectual property, and related litigation fields, CPH has a renowned Internet law practice.

Realizing the full potential of a client's business is the company's primary goal. The CPH team best serves clients by developing long-term partnerships. CPH boasts a diverse client list including a mix of global corporations, emerging technology enterprises, portfolio companies of investor/private-equity funds and start-ups and entrepreneurs.

Some of CPH's most successful clients first came while still experimenting in their garages. Working hand-in-hand with them CPH obtained their first patent, guided them through their initial developments and watched them achieve market leadership.

Anticipating clients' needs, CPH provides practical, cost-effective advice. They create value in their services thorough analysis, experienced judgment, and innovative approaches concerning:

- 1) The profitable exploitation of intellectual property
- 2) Controlling the costs of creating and protecting intellectual property
- 3) Licensing intellectual property
- 4) Creating and protecting intellectual property in foreign markets
- 5) Dealing with encroachment on intellectual property rights

In the tradition of their founders, all of the firm's patent attorneys hold degrees in some field of science or engineering. The range of expertise includes advanced degrees in biotechnology, computer science, electronics, mechanics, material sciences, chemistry, and medical technology. CPH attorneys effectively handle subject matter in all fields of technology. Teaming seasoned litigators with technically versed patent prosecutors is one of their greatest strengths for successfully handling litigation and related issues.