



ANNIVERSARY SYMPOSIUM

Columbia's Engineering Renaissance: Foundation for the Future

Friday, November 14, 2014, 2–4 p.m., Reception to follow
Roone Arledge Auditorium, Lerner Hall

WELCOME AND INTRODUCTION

Mary Cunningham Boyce

Dean of Engineering and Morris A. and Alma Schapiro Professor

Andreas H. Hielscher

Professor of Biomedical Engineering, Electrical Engineering, and Radiology

Shree Nayar

T. C. Chang Professor of Computer Science
Data Science: The 1890 Census
(Herman Hollerith)

Chris H. Wiggins

Associate Professor of Applied Mathematics
Data Science: Transforming the 21st Century

Raimondo Betti

*Professor of Civil Engineering and
Engineering Mechanics*
Building Connections
(William Barclay Parsons)

Andrew Smyth

*Professor of Civil Engineering and
Engineering Mechanics*
Smart, Secure, Sustainable Cities

Venkat Venkatasubramanian

*Samuel Ruben–Peter G. Viele Professor of
Engineering*
Global Health: Mass Production of
Antibiotics (Elmer Gaden)

Jingyue Ju

*Samuel Ruben–Peter G. Viele Professor of
Engineering, Professor of Chemical Engineering,
and Professor of Pharmacology*
Precision Medicine: Pioneering
Genome Technology

Alan C. West

*Samuel Ruben–Peter G. Viele Professor of
Electrochemistry and Professor of Chemical
Engineering*
Pioneering Electrochemistry (Colin Fink)

Chris Marianetti

*Associate Professor of Materials Science and
Applied Physics and Applied Mathematics*
Computation and Materials Discovery

Jeffrey Kysar

Professor of Mechanical Engineering
Frontiers of Engineering Science
(Raymond Mindlin)

Latha Venkataraman

Associate Professor of Applied Physics
Frontiers of Molecular Engineering

Upmanu Lall

*Alan and Carol Silberstein Professor of Earth
and Environmental Engineering and Professor of
Civil Engineering and Engineering Mechanics*
Environmental Sustainability: Sustainable
Mining (Herbert Kellogg)

Ah-Hyung (Alissa) Park

*Lenfest Chair in Applied Climate Science,
Interim Director of Lenfest Center for
Sustainable Energy, and Associate Professor of
Earth and Environmental Engineering*
Sustainable Energy: Carbon Sequestration

Helen H. Lu

Professor of Biomedical Engineering
Pioneers of Biomedical Engineering

Gordana Vunjak-Novakovic

*The Mikati Foundation Professor of
Biomedical Engineering and Professor of
Medical Sciences (in Medicine)*
Precision Medicine: Regenerative Engineering

Sunil Agrawal

Professor of Mechanical Engineering
Kinematics of Motion
(Ferdinand Freudenstein)

Eitan Grinspun

Associate Professor of Computer Science
Computational Motion

Patricia Culligan

Professor of Civil Engineering and
Engineering Mechanics
Translational Innovations for Livable Cities
(Charles F. Chandler)

Sam Sia

Associate Professor of Biomedical Engineering
Translational Innovations for a Livable World

Ward Whitt

Wai T. Chang Professor of Industrial
Engineering and Operations Research
Risk Management
(Cyrus Derman)

Garud Iyengar

Professor of Industrial Engineering and
Operations Research
Network Risk Management

Kenneth L. Shepard

Lau Family Professor of Electrical Engineering
and Professor of Biomedical Engineering
Pioneering Molecular Films
(Irving Langmuir)

James C. Hone

Wang Fong-Jen Professor of
Mechanical Engineering
Frontiers of Nanoscale Engineering

Michael Mauel

Professor of Applied Physics
Pioneering Computational Fluid Dynamics
(C. K. [John] Chu)

Adam Sobel

Professor of Applied Physics and Applied
Mathematics and of Earth and Environmental
Sciences
Computational Earth and Atmospheric Science

George Deodatis

Santiago and Robertina Calatrava Family
Professor of Civil Engineering and
Engineering Mechanics
Infrastructure Safety: Structural Reliability
(Alfred M. Freudenthal)

Roxana Geambasu

Assistant Professor of Computer Science
Infrastructure Security: Privacy in a
Data-Driven World

Shih-Fu Chang

Richard Dicker Professor of
Telecommunications, Professor of Electrical
Engineering, and Professor of Computer
Science
Communication Channels: FM Radio
(Edwin H. Armstrong)

Keren Bergman

Charles Bachelor Professor of
Electrical Engineering
Communication Channels: Optical Networks

Andreas H. Hielscher

Professor of Biomedical Engineering, Electrical
Engineering, and Radiology
Electrical Engineering Pioneer: X-ray
Imaging (Michael I. Pupin)

Elizabeth Hillman

Associate Professor of Biomedical Engineering
and of Radiology (Physics)
Frontiers in Biomedical Imaging

CLOSING REMARKS**Dean Boyce**

Reception immediately following the program

**COLUMBIA | ENGINEERING**

The Fu Foundation School of Engineering and Applied Science

1864-2014