2017 MIT Research and Development Conference

November 15-16, 2017 • Kresge Auditorium, Building W16 • ilp.mit.edu/2017/rd • #MITRD

	Day 1: November 15 at Kresge Auditorium (Building W16, Kresge Auditorium)			
7:30	Registration and Light Breakfast			
8:30	**Welcome & Introduction** *Karl F. Koster, Executive Director, MIT Corporate Relations*			
8:40	**Industry Keynote: Industrial Innovation … Where Research Meets Reality** *Vic Abate, CTO & SVP, GE*			
9:15	**Academic Keynote: Challenges and Future Scenarios in Energy Policy and Technology, Related R&D, and Innovation Investments** *Ernest Moniz, Cecil and Ida Green Professor of Physics and Engineering Systems Emeritus, Former U.S. Secretary of Energy, Special Advisor to the MIT President*			
10:00	Networking Break			
10:40	**Industry Keynote: Technology Strategy and Innovation at Lockheed Martin** *Robie Samanta Roy, VP of Technology Strategy and Innovation, Lockheed Martin*			
11:20	**MIT Startup Exchange: Introduction and Lightning Talks** *Trond Undheim*			
12:00	**Lunch and Startup Exhibit @ Walker Memorial** (Building 50) Luminoso, Celect, Humatics, Gamalon, Legit Patents, Digital Alloys, Liquid Piston, Advanced Potash, Drafted, Bounce Imaging, Analytical Space, Uncountable, Composable Analytics, Advent Tech Lab			
	Concurrent Technology Tracks at Stratton Student Center (Building W20)			
	Track 1: The Latest Development of Nanotechnology	**Track 2: Internet Policy Research Initiative**	**Track 3: Technologies and Strategies for Sustainability**	**Track 4: New Technologies in the Age of Exploration**
2:00	**Transforming Nanotechnologies into Applications** *Max Shulaker*	**Data Ownership Impact on Privacy and Security** *Daniel Weitzner*	**MIT Environmental Solutions Initiative: moving forward with industry** *John Fernández*	**James Webb Space Telescope – NASA's Next Great Observatory** *Scott Willoughby*
2:45	**Chemistry of the Graphene Surface for the Creation of Functional Nanomaterials** *Timothy Swager*	**Internet Governance and Culture** *David Clark*	**Innovation in agriculture, water, food, mobility, materials and structures, and urban design** *Markus Buehler*	**Mapping the Nearest Stars for Habitable Worlds** *Sara Seager*
3:30	Networking Break			
4:00	**Making nano big – hierarchical design and manufacturing** *Markus Buehler*	**Blind Machine Learning** *Vinod Vaikuntanathan*	**Informing design of resource-effective materials, processes and systems** *Elsa Olivetti*	**Ecological engineering with CRISPR and gene drive** *Kevin Esvelt*
4:45	**Semiconductor quantum technologies for communications and computing** *Dirk Englund*	**Cybersecurity Impacts on International Trade** *Simon Johnson*	**The Business Opportunity of Sustainability-Oriented Innovation** *Jason Jay*	**Community Biotechnology Initiative** *David Sun Kong*
5:30	Networking Reception with MIT's Global Internship Program (MISTI) Exhibit @ **Kresge Lobby** (Building W16)			

* All schedule and speakers are subject to change without notice. (11.9.17)

MIT Technology and the Corporation Conference Series

Massachusetts Institute of Technology

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	Day 2: November 16, 2017 at Kresge Auditorium (Building W16)		
8:00	Registration and Light Breakfast		
8:30	**Welcome & Introduction**		
8:35	**How we are educating the next generation of innovators at MIT, and how industry can participate** *Anantha Chandrakasan, Dean of Engineering, MIT*		
9:05	**Industry Keynote: Accelerating Takeda's R&D Successes** *Andrew Plump, Chief Medical and Scientific Officer, Takeda Pharmaceutical Company*		
9:35	Networking Break		
	Concurrent Technology Tracks at Stratton Student Center (Building W20)		
	Track 5: The Future of Urban Mobility	**Track 6: Advanced Manufacturing**	**Track 7: Frontiers in Materials Research**
10:00	**Faster, Smarter, Greener: The Future of the Car and Urban Mobility** *Charles Fine*	**Computational Manufacturing** *Wojciech Matusik*	**Harnessing high temperature materials for extraction and processing** *Antoine Allanore*
10:45	**How autonomous driving will change mobility** *Daniela Rus*	**Bio-inspired metal-coordination crosslinking: easy access to broad dynamics for new engineering of polymer mechanics** *Niels Holten-Andersen*	**Engineering Ceramic and Glass-Materials for Energy Storage, Sensing and Computing** *Jennifer Rupp*
11:30	Networking Break		
11:45	**City of the future: how changes to physical and digital infrastructure will effect and be effected by mobility** *Kent Larson*	**Structural biopolymers – using Nature's building blocks as an inspiration for advanced manufacturing** *Benedetto Marelli*	**Germanium: Low Cost, High Performance Solar Cells and Photonics Devices** *Jurgen Michel*
12:30	**Panel Discussion: Policies, economics, business models and technologies for mobility of the future** ***Moderator**: Venkat Sumantran* ***Panelists**: Jim Womack, Valerie Karplus, Carlos Lima Azevedo*	**Build AI products faster, cheaper** *Kalyan Veeramachaneni*	**Electronic, Optical and Magnetic Materials for Probing and Interrogation of Neural Function** *Polina Anikeeva*
1:15	Adjournment and Bagged Lunch		

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