

International Symposium

Science Across Boundaries

Seville (Spain), March 22nd-24th, 2026

*To examine the frontiers of interdisciplinary research transforming society
& to honor the scholarly impact and global leadership of Prof. Subra Suresh*

Organizers:

Javier LLorca, IMDEA Materials, Madrid, Spain

Jaime Dominguez, Universidad Sevilla, Spain

Conference Administrator:

Mariana Huerta, IMDEA Materials, Madrid, Spain

www.scienceacrossboundaries.org

With participation and support from:



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BROWN

PRELIMINARY PROGRAM

As of 26 January 2026

Symposium Organizing Committee:

Javier LLorca, IMDEA, Madrid, Spain
Jaime Dominguez, Universidad Sevilla, Spain
Ming Dao, MIT, Cambridge, MA, USA
Lei Lu, Institute for Materials, Shenyang, China
Nitin Padture, Brown University, Providence, RI, USA
Chwee Teck Lim, National University of Singapore

Symposium Secretariat



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Sunday, March 22, 2026

19.00-21.00 Welcome Reception and Registration

Hotel Alfonso XIII, San Fernando 2, Seville, Spain, 41004

Monday, March 23, 2026, and Tuesday, March 24, 2026

Venue for the conference:

La Real Fábrica de Tabacos de Sevilla, Calle San Fernando, 3, 41004 Sevilla

Monday, March 23, 2026, Conference Banquet, 20:15-23:15 hours

Venue: Restaurant “Rio Grande”. C. Betis, 69. 41004 Sevilla

Symposium Preliminary Program

Monday, March 23, 2026

8.30 – 9.00 Registration

9.00 – 9.30 Opening ceremony

Jaime Domínguez, President, Royal Spanish Academy of Engineering, Spain

Carmen Vargas, Rector, University of Seville, Spain

Javier LLorca, Founding-Director, IMDEA Materials Institute, Madrid, Spain

9.30 – 11.30 Session 1: Materials for a Sustainable Planet

Session Chairs: **Nitin Padture** (Brown University, USA)

Eduard Arzt (UC San Diego, USA & Leoben, Austria)

9.30 – 10.00: Plenary lecture 1:

Julia Marton-Lefèvre (Chair, Board of Directors, Villars Institute & Former Director General, International Union for Conservation of Nature, Switzerland; Former Exec. Director, International Council for Scientific Unions, Paris, France)

10.00 – 10.30: Plenary lecture 2:

Dierk Raabe (Director, Max-Planck Institute for Sustainable Materials, Dusseldorf, Germany)

10.30 – 11.00 Coffee Break

11.00 – 12.00 Panel session on Materials for a Sustainable Planet

Panel Chairs: **José Andrade** (California Institute of Technology, Pasadena, CA, USA)

Nam-Joon Cho (NTU, Singapore)

Panelists: **Eleftheria Roumeli** (University of Washington, Seattle, USA)

Pradeep Guduru (Brown University, RI, USA)

Michael Saliba (Univ. of Stuttgart & Forschungszentrum Jülich, Germany)

Nuwong (Kob) Chollacoop (National Energy Technology Center, Thailand)

Amit Bandyopadhyay (Washington State University, Pullman, WA, USA)

12:00 - 13.00 Lunch

13.00 – 15.00

Session 2: Science, Innovation and Society

Session Chairs: **C. Fong Shih** (University Professor and Former President, National University of Singapore & Former President, KAUST, Saudi Arabia)
Costas Synolakis (USC Tsunami Research Center, University of Southern California, USA & Professor at the Technical University of Crete, and former President of Athens College, Greece)

13.00 – 13.30:

Plenary lecture 3:

Enrico Letta (Former Prime Minister of Italy; Former Member of the European Parliament; Dean of the IE School of Politics, Economics and Global Affairs at IE University in Madrid, Spain, & President of the Jacques Delors Institute in Paris, France)

13.30 - 14.00:

Plenary lecture 4:

Anil Ananthaswamy (Indian Institute of Technology, Madras, India)

14.00 – 15.00

Panel session on Science, Innovation and Society

Panel Chairs: **Lee Howell** (Executive Director, Villars Institute, Switzerland)
Dedric Carter (Chief Innovation Officer & Vice Chancellor for Innovation, University of North Carolina at Chapel Hill, NC, USA)

Panelists: **Nigel Croft** (former Chairman, ISO Technical Coordination Group, Geneva)
Christine Ortiz (Director, Technology & Policy Program, MIT, MA, USA)
Chris Schuh (Northwestern University, Evanston, IL, USA)
Sanjay Sampath (University of Stony Brook, NY, USA)
K Jimmy Hsia (NTU, Singapore)

15.00 - 15.15 Coffee break

15.15 – 17.15 Session 3: Mechanics of Materials—Macro-, Micro-, and Nano-Scales

Session Chairs: **Wei Yang** (Former President, National Natural Science Foundation of China & Former President, Zhejiang University, China)
 Yu-Lin Shen (University of New Mexico, Albuquerque, NM, USA)

15.15 – 15.45: **Plenary lecture 5:**

Robert Ritchie (University of California, Berkeley, CA, USA)

15.45 - 16.15: **Plenary lecture 6:**

Ares Rosakis (California Institute of Technology, Pasadena, CA, USA)

16:15 – 17.15 Panel session on Mechanics of Materials

Panel Chairs: **G. (Ravi) Ravichandran** (Caltech, Pasadena, CA, USA)
 Lei Lu (Institute for Materials Research, Shenyang, China)

Panelists: **Julia Greer** (California Institute of Technology, Pasadena, CA, USA)
 Antonios E. Giannakopoulos (National Technical University of Athens, Greece)
 U. Ramamurty (NTU, Singapore)
 Sarah Bentil (Iowa State University, Ames, IA, USA)
 Yang Lu (Kingboard Professor, University of Hong Kong)

18.00 – 19.30 Guided visit to the Real Alcazar de Sevilla

20:15 – 23:15 Conference Banquet

Venue: Restaurant “Rio Grande”. C. Betis, 69. 41004 Sevilla

Tuesday, March 24th, 2026

9.30 – 11.30 Session 4: Bioengineering and Human Health

Session Chairs: **Tejal Desai** (Dean of Engineering, Brown University, RI, USA)
Taher Saif (University of Illinois, Urbana-Champaign, USA)

9.30 – 10.00: Plenary lecture 7:

Metin Sitti (President, Koç Üniversitesi, Istanbul, Turkey)

10.00- 10.30: Plenary lecture 8:

Dennis E. Discher (University of Pennsylvania, USA)

10.30 - 11.00 Coffee break

11.00 – 12.00 Panel session on Bioengineering and Human Health

Panel Chairs: **Krystyn Van Vliet** (Vice President for Research and Innovation, Cornell University)
Pierre Buffet, MD (Medical Director, Institut Pasteur, Paris; Professor of Cellular Biology at Université Paris Cité; and Clinician, Paris Public Hospital Network (AP-HP), Paris, France)

Panelists: **Mukesh Jain, MD** (Dean of the School of Medicine, Brown University, USA)
Lisa Pruitt (University of California, Berkeley, CA, USA)
Tony Huang (Duke University, North Carolina, USA)
Sarah Du (Florida Atlantic University, Florida, USA)
Robert J. Asaro (University of California San Diego, USA)

12.00 – 13.00 Lunch

13.00 – 15.00	<u>Session 5: Artificial Intelligence Across Scientific Disciplines</u>
Session Chairs:	Nicholas Dirks (President, NY Academy of Sciences, NY, USA & Former Chancellor, University of California, Berkeley, USA)
13:00 – 13:30:	Plenary lecture 9: Artificial Super Intelligence?
	Yann LeCun (New York University, NY, USA, and Co-founder, World Models, Paris, France, & former Chief AI Scientist, META; Turing & Queen Elizabeth Prizes recipient)
13:30 – 14:00:	Plenary lecture 10: AI for Science
	George Karniadakis (Brown University, RI, USA) Ju Li, Markus Buehler & Ming Dao (MIT, Cambridge, MA, USA)
14.00 – 15.00	<u>Panel session on Artificial Intelligence Across Scientific Disciplines</u>
Panel Chairs:	Mory Gharib (California Institute of Technology, Pasadena, CA, USA) Antoine Jerusalem (University of Oxford, UK)
Panelists:	Pranesh Aswath (Provost, Texas State University, TX, USA) B. Ravindran (Founding Dean of the Wadhwani School of Data Science and Artificial Intelligence & Founding Head of the Robert Bosch Centre for Data Science and Artificial Intelligence, Indian Institute of Technology, Madras) Marc Finot (Principal Consultant, MF Analytics LLC, Palo Alto, CA, USA) Kevin Turner (Chair, Mechanical Engineering, U. of Pennsylvania, PA, USA) Anna Celner (Senior Advisor, Global Learning Council , Switzerland, & former Vice Chair, Deloitte, UK)
15.00 – 15.15	Coffee Break
15:15 – 15.40	<u>Reports from the Co-Chairs of the Rapporteurs Council</u>
Co-Chairs:	Krishnan Narayanan (President, Itihaasa, Bengaluru, India) Christos E. Athanasiou (Georgia Institute of Technology, Atlanta, GA, USA)
15:40 – 16:00	Conference Closing Remarks

Council of Rapporteurs for the Symposium

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