

MI

Ansys
**MATERIAL
INTELLIGENCE
DAY** 2021

/ AGENDA

Make Material Intelligence Count

Our new virtual event – Ansys Material Intelligence Day will showcase best practice from across industry, research and academia.

NOVEMBER 3, 2021

REGISTER ▶

FULL AGENDA-AT-A-GLANCE

13:00 (GMT)
09:00 (EDT)
13:05 (GMT)
9:05 (EDT)

WELCOME

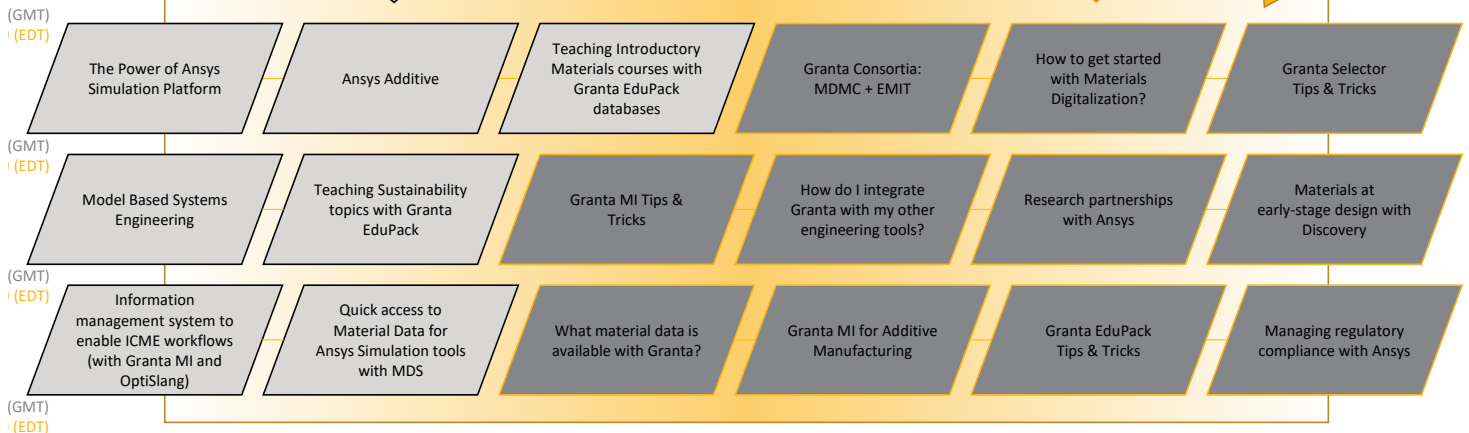
LIVE Opening Panel		
The intersection of materials for industry, research and academia		
Steve Arnold – NASA / Andrew Clifton -Rolls-Royce / Danielle Cote – WPI Dave Cebon – Ansys & University of Cambridge / Terry Wong – Aerojet Rocketdyne		
Industry	Research	Education
Keynote Materials Database Replacement Amandeep Singh Mhay - Rolls-Royce	Keynote Emerging Tools & Methods Dr. David Furrer - Pratt & Whitney	Keynote Vision for Materials and Sustainable Development Prof. Ashby - Cambridge University
Materials Digitalization Prashanth CS - Garrett Motion / Jannik Dippel - Sartorius Group / Gianpiero Cerrone - Lamborghini / Olivier Steiner; Jean-Baptiste Guillot - Richemont	Additive Manufacturing Louis Chiu, Aijun Huang - Monash University / Anthony Rollett, Elizabeth Holm - Carnegie Mellon University / Tyler London – TWI	Innovation in Materials Education Danielle Cote - WPI / Olga Ushakova – Skoltech / Sepideh Ghodrat - TU Delft / Júlio César Dutra - Centro Universitário FEI
Environmental, Social & Governance Claude Neri - Chemwatch / Mike Lough - Ansys / Stella Job – Aerospace Technology Institute / James Dean Cotton –JDC Consulting & Music / Russel Stratton - P&W	Materials 4.0 Steve Arnold - NASA / Gareth Conduit - Intellegens / Andrea Browning - Schroedinger / Glen Jones - Johnson Matthey	Infusing the Curriculum with Sustainability Javier Orozco-Messana - Universitat Politècnica de Valencia / Jan Pedersen and Karsten Lund - University of Southern Denmark / Birgitt Peeters - Agoria Solar Team / Billal Mansoor Texas A&M Qatar
Solving Materials Challenges Pascal Gauthier, Jerome Fourmann - Rio Tinto / Mark Collins - Electroflight / Sebastien Moussard - Polyvia / Matt Jevons - MT Aerospace	Materials for Electronics Applications Billy Wu - Imperial College London / Argiris Laskarakis - Aristotle University of Thessaloniki (Nanotechnology Lab) / Sullivan Smith - EV-JOIN / Emma Kendrick - University of Birmingham	Digital Multidisciplinary Teaching Lessa Grunenfelder - University of Southern California / Susan Gentry - University of California, St Davis / Bert Blocken - Eindhoven University of Technology / Bosco Yu and Liza DiCecco - McMaster university

17:00 (GMT)
13:00 (EDT)

ADVANCED Materials Applications

Granta Showroom

LIVE Breakout rooms



LIVE OPENING PANEL

13:00 (GMT) / 9:00AM (EDT)

Welcome



Industry



Research



Education



13:05 (GMT) / 9:05 AM (EDT)

The intersection of materials for industry, research and academia

What is the materials engineering toolbox of the future?



Steven Arnold

Technical Lead,
Multiscale Multiphysics Modelling
NASA Glenn Research Centre



Danielle Cote

Assistant Professor in Materials
Science & Engineering
Worcester Polytechnic Institute



David Cebon

Ansys Fellow, Professor
Cambridge University



Anthony Dawson

VP & GM Product
Ansys



Andy Clifton

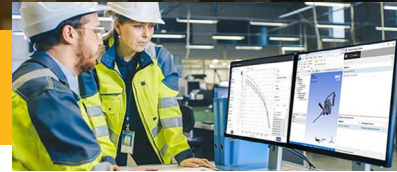
Global Sustainability Manager
Rolls-Royce



Terry Wong

Material Process and Engineering
Aerojet Rocketdyne

INDUSTRY TRACK



14:00 (GMT) / 10:00 AM (EDT)

KEYNOTE PRESENTATION:
Granta MI – Materials Database Replacement Programme
 Amandeep Singh Mhay
 Rolls-Royce

Materials Digitalization	Environmental, Social & Governance	Solving Materials Challenges
<p>Garrett Material Data Management</p> <p>Prashanth CS Garrett Motion</p>	<p>14:45 (GMT) / 10:45 AM (EDT)</p> <p>Chemwatch for Granta MI</p> <p>Claude Neri & Michael Lough Chemwatch & Ansys</p>	<p>Designing For Speed and Sustainability: Materials Selection for Critical Parts</p> <p>Mark Collins Electroflight</p>
<p>Material selection processes within the highly regulated biopharmaceutical industry</p> <p>Jannik Dippel Sartorius</p>	<p>15:15 (GMT) / 11:15 AM (EDT)</p> <p>FlyZero: Designing for sustainable zero carbon aviation</p> <p>Stella Job Aerospace Technology Institute</p>	<p>Super Lightweighting for components of the Ariane rocket (TBC)</p> <p>Matt Jeavons MT Aerospace</p>
<p>Lamborghini shares Best Practices in Materials Data Management</p> <p>Gianpiero Cerrone Lamborghini</p>	<p>16:00 (GMT) / 12:00 AM (EDT)</p> <p>Identification of sustainable tonewoods for acoustic guitars using Granta Selector</p> <p>James D Cotton JDC Materials Consulting</p>	<p>Rio Tinto 2040 - vision for aluminium products development and data management</p> <p>Pascal Gauthier & Jerome Fourmann Rio Tinto</p>
<p>Granta MI @ Richemont: THE MAGIC PROJECT</p> <p>Olivier Steiner & Jean-Baptiste Guillot Richemont</p>	<p>16:30 (GMT) / 12:30 AM (EDT)</p> <p>Aircraft Engine Sustainability</p> <p>Russell Stratton Pratt & Whitney</p>	<p>The challenge of switching to recycled polymers with Polyvia</p> <p>Sebastien Moussard Polyvia</p>

RESEARCH TRACK



14:00 (GMT) / 10:00 AM (EDT)

KEYNOTE PRESENTATION:
Emerging Tools and Methods for Materials Development, Definition and Application
 David Furrer
 Pratt & Whitney

Additive Manufacturing	Materials 4.0	Materials for Electronics Applications
<p>Data collection and usage in research environment</p> <p>Louis Chiu Monash University</p>	<p>14:45 (GMT) / 10:45 AM (EDT)</p> <p>ICME and Future Directions for Material Modelling</p> <p>Steve Arnold NASA</p>	<p>Battery pack design – from cell selection to pack materials</p> <p>Billy Wu Imperial College</p>
<p>Development of an Ecosystem for Qualification of AM Processes and Materials in Aviation</p> <p>Prof. Anthony Rollett Carnegie Mellon University (NextManufacturing)</p>	<p>15:15 (GMT) / 11:15 AM (EDT)</p> <p>Molecular Design for Materials Properties</p> <p>Andrea Browning Schrödinger, Inc</p>	<p>Bringing intelligence in nano-manufacturing of Organic & Printed Electronics by in-line metrology and advanced data management</p> <p>Argiris Laskarakis Nanotechnology Lab LTFN, Aristotle University of Thessaloniki</p>
<p>Process control & optimization for Additive Manufacturing</p> <p>Tyler London TWI</p>	<p>16:00 (GMT) / 12:00 AM (EDT)</p> <p>A faster way to develop & optimize composite materials</p> <p>Charlie Bream, Koji Yamamoto, Chandima Uyanage Ansys & Cybernet</p>	<p>How joining technology can provide solutions for the electrical revolution</p> <p>Sullivan Smith TWI / EV JOIN</p>
<p>Innovative machine learning for data-driven design of AM materials and processes</p> <p>Gareth Conduit Intellegens</p>	<p>16:30 (GMT) / 12:30 AM (EDT)</p> <p>Physical and Chemical Modelling in Johnson Matthey</p> <p>Glen Jones Johnson Matthey</p>	<p>Sustainability in batteries</p> <p>Emma Kendrick University of Birmingham</p>

EDUCATION TRACK



14:00 (GMT) / 10:00 AM (EDT)

KEYNOTE PRESENTATION:
Vision for Materials and Sustainable Development
 Prof. Ashby
 Cambridge University

Innovation in Materials Education

Infusing the Curriculum with Sustainability

Digital Multidisciplinary Teaching

Using Undergraduate Introduction to Materials Science Activities to Provide Student Interaction during Remote Learning

Danielle Cote
 Worcester Polytechnic Institute

14:45 (GMT) / 10:45 AM (EDT)

Transdisciplinary virtual collaboration for Urban sustainability projects. ISALab workshop

Javier Orozco-Messana
 Universitat Politècnica de Valencia

Teaching Computational Tools to Motivate Students for the Engineering Workforce

Susan Gentry
 University of California, St Davis

Re-design of Materials Science & Engineering Master program

Olga Ushakova
 Skolkovo Institute of Science and Technology

Sustainability used as a main factor in project work for undergraduate, first year students

Jan Pedersen and Karsten Lund
 University of Southern Denmark

Role of simulation in teaching sports and building aerodynamics

Bert Blocken
 Eindhoven University of Technology

Designing with Shape Memory Materials

Sepideh Ghodrat
 TU Delft

Infusing Granta Edupack to implement active learning cycle online

Billal Mansoor
 Texas A&M Qatar

Experiential Learning of Material Science: A Design-led approach

Bosco Yu and Liza Dicecco
 McMaster university

16:30 (GMT) / 12:30 AM (EDT)

Gamification with Ansys Granta

Júlio César Dutra
 Centro Universitário FEI

Finding the limits of technology in the Agoria Solar Team

Birgitt Peeters
 Agoria Solar Team

Creation and implementation of in-class activities for an online materials course

Lessa Grunenfelder
 University of Southern California

GRANTA SHOWROOM

ON-DEMAND SHOWROOM

▶ LIVE

LIVE SHOWROOM
 (100 person limit)

17:00 (GMT) / 13:00 (EDT)

▶ LIVE

**Granta Consortia:
 MDMC + EMIT**

Rob Davis, Mike Lough, Dave Cebon

▶ LIVE

**How to get started with
 Materials Digitalization?**

Sak Arumugam, Joe Rasche

▶ LIVE

**Granta Selector
 Tips & Tricks**

Roger Barnett, Benedikt Duerbeck

**The Power of Ansys
 Simulation Platform**

Navin Budhiraja

Ansys Additive

Curt Chan, Nilay Parikh

**Teaching Introductory
 Materials courses
 with EduPack**

Kaitlin Tyler

17:30 (GMT) / 13:30 (EDT)

▶ LIVE

**Granta MI
 Tips & Tricks**

Charlie Bream, Sergio Calleja

▶ LIVE

**How do I integrate
 Granta with my other
 engineering tools?**

Remi Mesnildrey, Geoff Lunn

▶ LIVE

**Research partnerships
 with Ansys**

Donna Dykeman, Davide Di Stefano

▶ LIVE

**Materials at early stage
 design with Discovery**

Curt Chan, Roger Barnett, Tejas Rao

**Model Based Systems
 Engineering**

Will Marsden

**Teaching
 Sustainability topics
 with Granta EduPack**

Mauricio Dwek

18:00 (GMT) / 14:00 (EDT)

▶ LIVE

**What material data is
 available with Granta?**

Roger Barnett, Luke Brown

▶ LIVE

**Granta MI for Additive
 Manufacturing**

Sak Arumugam, Nilay Parikh

▶ LIVE

**Granta EduPack
 Tips & Tricks**

Susannah Cooke, Claes Fredriksson

▶ LIVE

**Managing regulatory
 compliance with Ansys**

Ben Conlon, Marc Horner

**Using Ansys
 Granta MI + OptiSLang to
 enable ICME workflows**

Davide Di Stefano, Ludovic Steinbach

**Quick access to Material
 Data for Ansys Simulation
 tools with MDS**

Scott Wilkins

The logo features the letters 'MI' in a large, bold, 3D yellow font. To the right, the 'Ansys' logo is in white, followed by 'MATERIAL INTELLIGENCE DAY' in white uppercase letters. The year '2021' is displayed in white on a yellow rectangular background.

MI Ansys
MATERIAL
INTELLIGENCE
DAY 2021

/ Reserve your Place

NOVEMBER 3, 2021

REGISTER NOW ▶

Share with a colleague who may benefit too