8th European Conference on Corporate R&D and Innovation

22 - 25 November 2021

Virtual conference

CONCORDi 2021

Industrial innovation for competitive sustainability

Programme
Programme
(FINAL)

Conference’s dedicated webpage: https://iri.jrc.ec.europa.eu/concordi-2021

OUTLINE OF THE PROGRAMME

Monday 22 November 2021

- **Opening Plenary: Industrial innovation in the EU policy context - 9h30-10h45**
  Chair: **Mikel Landabaso**, Director, Growth and Innovation Directorate of the Joint Research Centre, European Commission
  - **Maive Rute**, Deputy Director-General, Internal Market, Industry, Entrepreneurship and SMEs Directorate-General, European Commission
  - **Ulrik Vestergaard Knudsen**, OECD Deputy Secretary-General
  - **Hiroshi Kuniyoshi**, Deputy to the Director General, UNIDO
  - **Antti Vasara**, President, EARTO and President and CEO, VTT
  - **Jean-Eric Paquet**, Director-General, Research and Innovation Directorate-General, European Commission: “R&I key for sustainability, recovery and resilience”
  - **Stephen Quest**, Director-General, Joint Research Centre, European Commission: “Science-to-policy for competitive sustainability”

  Comfort Break 10:45-11:00

- **Plenary Session: Industrial innovation for competitive sustainability – 11h00-12h00**
  Chair: **Xabier Goenaga**, Head of Knowledge for Finance, Innovation & Growth Unit, Growth and Innovation Directorate of the Joint Research Centre, European Commission.
  Keynote: **Kevin O’Connor**, Co-Founder of Biplastech Ltd. and Professor at University College Dublin (IRE) “Biodegradable plastics innovation for sustainability: an Entrepreneurial experience”
  Keynote: **Reinilde Veugelers**, Professor of Managerial Economics, Strategy and Innovation at the Katholieke Universiteit Leuven (BEL) “How to do green industrial policy?”
  Discussant: **Eline Chivot**, Senior Adviser on Digital Policy at the European People’s Party (BEL)

- **Parallel Sessions on Industrial transition in times of recovery 15h00-17h00**
  - Parallel Sessions A1 and A2 (15h00-15h55)
  - Comfort Break 10’
  - Parallel Sessions A3 and A4 (16h05-17h00)
Tuesday 23 November 2021

- **Plenary Session:** “The role of world’s top R&D performers to achieve carbon neutrality objectives” - 10h00-10h45
  Chair: Chiara Criscuolo, Head of the Productivity, Innovation and Entrepreneurship Division, OECD Directorate for Science, Technology and Innovation
  Keynote: Dirk Pilat, Deputy-Director, OECD Directorate for Science, Technology and Innovation. “World Corporate Top R&D investors: Paving the way to climate neutrality”. Results from the joint OECD-EC/JRC report
  Lead discussant: Mikel Landabaso, Director of Growth and Innovation of the Joint Research Centre, European Commission

Comfort Break 10h45-11h00

- **Plenary Panel discussion:** “Innovating for climate neutrality: Large corporations, start-ups, and the broader industrial ecosystem” 11h00-12h00
  Chair: Antoine Dechezleprêtre, Senior Economist, Productivity, Innovation and Entrepreneurship Division, OECD Directorate for Science, Technology and Innovation
  o Paul Ekins, Professor of Resources and Environment Policy & Director of the Green Innovation Policy Commission, University College London (GBR)
  o Kirsten Dunlop, CEO, EIT Climate-KIC (NDL)
  o Anthony Hobley, Co-Executive Directors, Mission Possible Partnership & Executive Fellow, World Economic Forum (CHE)
  o Lisa Unkelhäusser, Senior Partner, Bosch Climate Solutions (DEU)

- **Parallel Sessions on** “Industrial Innovation for sustainable transformations” – 15h00-17h00
  o Parallel Sessions B1 and B2 (15h00-15h55)
    Comfort Break 10’
  o Parallel Sessions B3 and B4 (16h05-17h00)

Wednesday 24 November 2021

- **Plenary Session:** The future of industrialization in a post pandemic world: Focus on developing countries – 10h00-11h25
  Chair: Nobuya Haraguchi, Chief, Research and Industrial Policy Advice Division, UNIDO
  o Opening remarks: Hiroshi Kuniyoshi, Deputy to UNIDO’s Director General. “Fostering inclusive, sustainable and resilient industrial development through digital and green technologies”
  o Keynote: Keun Lee, Seoul National University (KOR). “Digitalization and greening as windows of opportunity for leapfrogging in the post-pandemic world”
  o Discussants: Alessandro Rainoldi (EC-JRC), Alejandro Lavopa (UNIDO)

Comfort Break 11h25-11h40
• **Plenary Session: Inclusive and Sustainable Industrial Recovery through Digital Transformation - focus on developing countries** - 11h40-12h30
  
  Chair: **Marco Kamiya** (Chief, Digitalization and Innovation, UNIDO)
  
  ○ Keynote: **Bernardo Calzadilla-Sarmiento** “UNIDO Strategic approach: Making the Fourth Industrial Revolution work for all”
  
  ○ Panel discussion on “digital and green transitions in the context of the Decade of Action of the SDGs”
    - **Elfi Klumpp**, Head of Partnership Development Global Education; Festo Didactic
    - **So Young Kim**, Director, Korea Policy Center for the Fourth Industrial Revolution (KPC4IR).
    - **Elizabeth Tuerk**, Director, Economic Cooperation and Trade, UN Economic Commission for Europe (UNECE).

• **Parallel Sessions. The greening of the economy: challenges to achieve SDGs** – 15h00-16h00
  
  ○ **Parallel Sessions C.1 and C.2** (15h00-16h00)

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**Thursday 25 November 2021**

**Plenary Session: RTOs in Industrial Innovation Ecosystems: Ensuring Europe’s Competitiveness & Sustainability** – 10h00-12h30

Introduction by **Antti Vasara**, President, EARTO, and President and CEO, VTT (FIN)

**Plenary - part 1: Technology Infrastructures: Key enablers for the transition to a sustainable and digital industry**

Introduction by moderator **Muriel Attané**, Secretary General, EARTO

○ Video on the role of Technology Infrastructures for Europe’s Prosperity & Sustainable Future, featuring **Thomas Kallstenius**, CEO, LIST (LUX); **João Claro**, CEO, INESC TEC (PRT); **Xavier Lopez**, CEO, EURECAT (ESP); **William Scanlon**, CEO, Tyndall (IRL)

○ Keynote: **Anna Panagopoulou**, Director “ERA and Innovation”, Research and Innovation Directorate-General, European Commission: “Towards an integrated European technology infrastructure landscape”

○ Presentation of “JRC Policy Brief on Technology Infrastructures” by **Fabio Taucer**, Deputy Head of Unit Scientific Development European Commission – JRC.

○ Presentations of Technology Infrastructures’ Case Studies: **Monica Ringvik**, CTO, RISE; **Pierre Vedrine**, Head of Accelerators, Cryogenics and Magnetism Department, CEA; **Anne Vanden Bosch**, Director Public R&D Policies and Programs, Imec; **Dmitri Petrovych**, Corporate Expert at INL; **Andrzej Taube**, Area Leader at Institute of Microelectronics and Photonics, Łukasiewicz Research Network; **Esther Hurtós**, R&I Policy and Funding Programmes, EURECAT.
Plenary - part 2: The role of RTOs to deliver impact on the economy and for society

- Introduction by moderator Sophie Viscido, Senior Advisor - Policy Strategy and Analysis, EARTO
- Presentation of OECD-EARTO Study by Philippe Larrue, Policy Analyst, OECD
- Presentations of RTOs’ Impact Assessment Studies: Angélica López Sobrado, Technology Watch and Strategic Surveillance Manager, Tecnalia; Marcel de Heide, Senior Economist and Researcher Strategy and Policy, TNO; Torben Schubert, Deputy Head of the Competence Center Innovation and Knowledge Economy, Institute for Systems and Innovation Research ISI, Fraunhofer; Ingrid Lundestad, Head of Strategic Analysis, SINTEF; Kirsi-Maria Hyytinen, Senior Scientist, VTT Technical Research Centre of Finland.

Closing address: Antti Vasara, President, EARTO, and President and CEO, VTT (FIN)

• Closing Plenary Session of the Conference 15h00-17h00

  Chair / Moderator: Daria Tataj (Funder and CEO, Tataj Innovation – POL/ESP; Strategic Advisor, European Institute of Public Administration)

  Closing Plenary – part 1: Summary Panel of Scientific results from plenary and parallel sessions

  - Rapporteur of Day 1 Alexandr Hobza (EC-DG R&I and Scientific Committee member)
  - Rapporteur of Day 2 Román Arjona (EC-DG GROW and Scientific Committee member)
  - Rapporteur of Day 3 Fernando Santiago (UNIDO and Scientific Committee member)
  - Rapporteur of Day 4-morning. Sophie Viscido (EARTO and Scientific Committee member)

  Announcement of CONCORDI 2021’s Best scientific paper award winner.

  Comfort Break 15h45-16h00

  Closing Plenary – part 2: Policy-makers’ round table

  - Panellist: Peter Dröll (Director, Prosperity – EC-DG R&I)
  - Panellist: Geraldine Mahieu (Acting Director, Investment, growth and structural reform - EC-DG ECFIN)
  - Panellist: Outi Slotboom (Director, Strategy and Economic Analysis - EC-DG GROW)
  - Reply statements from Xabier Goenaga (EC-JRC), Muriel Attané (EARTO), Dirk Pilat (OECD) and Patrick Gilabert (UNIDO)

  Concluding remarks: Mikel Landabaso (Director, Growth and Innovation Directorate - EC-JRC)

17h00 - END of the Conference
FULL PROGRAMME

Monday 22 November 2021

Morning: 9h30 – 12h00

9h30-10h45 Opening Session: Industrial innovation in the EU policy context
Chair: Mikel Landabaso, Director, Growth and Innovation Directorate of the Joint Research Centre, European Commission [3’].

• Maive Rute, Deputy Director-General, Internal Market, Industry, Entrepreneurship and SMEs Directorate-General, European Commission [10’]
• Ulrik Vestergaard Knudsen, OECD Deputy Secretary-General [10’]
• Hiroshi Kuniyoshi, Deputy to the Director General, UNIDO [10’]
• Antti Vasara, President, EARTO [10’] [NOTE: available only from 10h00 to 10:45]
• Jean-Eric Paquet, Director-General, Research and Innovation Directorate-General, European Commission: “R&I key for sustainability, recovery and resilience”
• Stephen Quest, Director-General, Joint Research Centre, European Commission: “Science-to-policy evidence for competitive sustainability” [10’]

Q&A [10’] and Chair closes [2’].

10h45-11h00 Comfort Break

11h00-12h00 Plenary Session: Industrial innovation for competitive sustainability
Chair: Xabier Goenaga, Head of Knowledge for Finance, Innovation & Growth Unit, Growth and Innovation Directorate of the Joint Research Centre, European Commission. [3’]

• Keynote: Kevin O’Connor, Co-Founder of Biplastech Ltd. and Professor at University College Dublin (IRE) “Biodegradable plastics innovation for sustainability: an Entrepreneurial experience” [15’]
• Keynote: Reinhilde Veugelers, Professor of Managerial Economics, Strategy and Innovation at the Katholieke Universiteit Leuven (BEL) “How to do green industrial policy?” [15’]

Discussant: Eline Chivot, Senior Adviser on Digital Policy at the European People’s Party (BEL) [5’]

Q&A [10’] and Chair closes [2’].
**Parallel sessions A: Industrial transition in times of recovery**

*Legend: names of people in bold are chairs or speakers*

### A I 15h00 – 15h55

**Chair:** Maria Savona (University of Sussex, GBR, and Luiss University, ITA)

- **International Patent Protection and Trade: Transaction-Level Evidence**
  - Daniele Moschella (Sant’Anna School of Advanced Studies, ITA), Gaétan de Rassenfosse (École Polytechnique Fédérale de Lausanne, CHE), Marco Grazzi and Gabriele Pellegrino (Università Cattolica del Sacro Cuore, ITA)

- **Intangible assets, industry performance and finance during crises**
  - Peter Bauer (EC-JRC), Carlo Altomonte; Alberto Maria Gilardi, Chiara Soriolo (Bocconi University, ITA)

### A II 15h00 – 15h55

**Chair:** Gaétan de Rassenfosse (École Polytechnique Fédérale de Lausanne, CHE)

- **Developing governance capacity for transformative policy: Insights from a comparative case study**
  - Matthijs Janssen, Iris Wanzenböck (Utrecht University, NLD); Lea Fünfschilling (Lund University, SWE) and Dimitris Pontikakis (EU-JRC)

- **Technology policy evaluation: The interaction between the financial constraint of firms and level of impact in term of financial additinality**
  - Joost Heijns, Diego Sancho and Alex J. Guerrero (Universidad Complutense de Madrid, ESP)

### 15h55-16h05 Comfort Break

### A III 16h05 – 17h00

**Chair:** Pierre-Alex Balland (Utrecht University, NLD)

- **The direction of technical change in AI and the trajectory effects of government funding**
  - Martina Iori, Andrea Mina and Arianna Martinelli (Sant’Anna School of Advanced Studies, ITA)

- **Productivity and HGEs: resilience and potential recovery from Covid-19 pandemic**
  - Sofia Amaral, Peter Bauer (EC-JRC); Alex Coad (Waseda University, JAP); Clemens Dommnick (JRC-JRC); Peter Harasztosi; Rosalia Pol (European Investment Bank), and Mercedes Teruel Carriosa (Universitat Rovira i Virgili, ESP)

### A IV 16h05 – 17h00

**Chair:** Elena Huergo (Universidad Complutense Madrid, ESP)

- **Do the two make a pair? Digital and green transition in European regions and their impact on greenhouse gas emissions**
  - Stefano Bianchini (Université de Strasbourg, FRA), Claudia Ghisetti (University of Milan Bicocca, ITA) and Giacomo Damiani (EC-JRC)

- **Going green and failing: Evidence from propensity score matching on types of eco-innovation and project failure**
  - Bettina Becker (Durham University Business School, GBR) and Effie Kesidou (Leeds University, GBR)

- **Choosing Technologies: Benefits of investing into the Development of Fourth Industrial Revolution Technologies**
  - Bettina Peters, ZEW-Mannheim, DEU/ University of Luxembourg, LUX and Markus Trunschke (ZEW-Mannheim, DEU/ KU Leuven, BEL)

- **International collaborations in green energy technologies: What is the role of distance in environmental policy stringency?**
  - Nicoletta Corrocher and Maria Luisa Mancusi (Università Bocconi, ITA)
Tuesday 23 November 2021

**Morning: 10h00 – 12h00**

10h00-10h45  Plenary Session: “The role of world’s top R&D performers to achieve carbon neutrality objectives”

Chair: Chiara Criscuolo, Head of the Productivity, Innovation and Entrepreneurship Division, OECD Directorate for Science, Technology and Innovation [5’]

- Keynote: Dirk Pilat, Deputy-Director, OECD Directorate for Science, Technology and Innovation. “World Corporate Top R&D investors: Paving the way to climate neutrality”- Results from the joint OECD-EC/JRC report [20’]

- Lead discussant: Mikel Landabaso, Director of Growth and Innovation of the Joint Research Centre, European Commission [10’]

Q&A [10’] and Chair to rap-up and conclude [5’]

10h45-11h00  Comfort Break

11h00-12h00  Plenary Panel discussion: “Innovating for climate neutrality: Large corporations, start-ups, and the broader industrial ecosystem”

Chair: Antoine Dechezleprêtre, Senior Economist, Productivity, Innovation and Entrepreneurship Division, OECD Directorate for Science, Technology and Innovation [introduces the panellists and chairs the panel discussion] [5’]

Panellists [35’ in total]:

- Paul Ekins, Professor of Resources and Environment Policy & Director of the Green Innovation Policy Commission, University College London (GBR)
- Kirsten Dunlop, CEO, EIT Climate-KIC (NDL)
- Anthony Hobley Co-Executive Directors, Mission Possible Partnership & Executive Fellow, World Economic Forum (CHE)
- Lisa Unkelhäusser, Senior Partner, Bosch Climate Solutions (DEU)

Q&A [15’] and Chair to rap-up and conclude [5’]
**Parallel sessions B: Industrial innovation for sustainable transformations**

*Legend: names of people in bold are chairs or speakers*

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<th>B I 15h00 – 15h55</th>
<th>B II 15h00 – 15h55</th>
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<tr>
<td><strong>Chair:</strong> Mariagrazia Squicciarini (UNESCO, FRA)</td>
<td><strong>Chair:</strong> Andreas Pyka (University of Hohenheim, DEU)</td>
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| For whom the bell tolls: the firm-level effects of automation on wage and gender inequality  
Giacomo Domini (Erasmus University Rotterdam, NLD),  
Marco Grazzi (Università Cattolica del Sacro Cuore, ITA)  
Daniele Moschella (Sant’Anna School of Advanced Studies, ITA) and Tania Treibich (Maastricht University, NLD). | Venture Capital Financing and Green Patenting  
Andrea Bellucci, Serena Fatica, Aliki Georgakaki (EC-JRC),  
Gianluca Gucciardi, (Unicredit, ITA), Simon Letout and Francesco Pasimeni (EU-JRC) |
| Corporate Social Responsibility, Board Gender Diversity, and Firm Innovation  
Sui Sui (Ryerson University, CAN) and Derek Ruth (Dominican University, DOM) | Knowing brown and inventing green? Incremental and radical innovative activities in the automotive sector between persistency and transition  
Julia Mazzei, Tommaso Rughi and Maria Enrica Virgillito (Sant’Anna School of Advanced Studies, ITA) |
| Gender diversity in R&D teams and firms’ environmental innovation strategies ’  
Prit Vahter (University of Tartu, EST) and Bettina Becker (Durham University Business School, GBR) | A Patent Analysis of Digitalization in Climate Change-Related Technologies: Innovation, Corporate Strategies, and Policy Implications  
Kevin Chandra and Masaru Yarime (Hong Kong University of Science and Technology, HKG) |

**15h55-16h05 Comfort Break**

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<th>B III 16h05 – 17h00</th>
<th>B IV 16h05 – 17h00</th>
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<tr>
<td><strong>Chair:</strong> Martin Srholec (CERGE-EI, Prague, CZE)</td>
<td><strong>Chair:</strong> Bram Timmermans (Norwegian School of Economics, NOR)</td>
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| On the road to regional ‘Competitive Sustainability’: The role of the European structural funds  
Anabela Santos, Javier Barbero, Simone Salotti, and Dimitrios Pontikakis (EC-JRC) | Do Consumers Shift from Private to Shared Ownership?  
Francesco Pasimeni (University of Sussex, GBR), Tommaso Ciarli (UNU-MERIT, NLD, and University of Sussex, GBR) |
| Impact of Climate Change Mitigation Technologies on Sustainable Development Transition  
Arash Hajikhani and Arho Suominen (VTT Technical Research Centre of Finland, FIN) | Building an OECD infrastructure for timely monitoring business R&D investment  
Fernando Galindo-Rueda and Fabien Verger (OECD, FRA) |
| Policies for a climate-neutral industry: Lessons from the Netherlands  
Antoine Dechezlepretre, Guy Lalanne, Luisa Dressler, Nicolas Gonne, Emile Cammeraat, Anderson Brilé, Joaquim Martins Gulihoto and Konstantinos Theodoropoulos (OECD, FRA) | Collaborative ecosystems between research organizations and companies from web scraped data: a vantage point to proximity of collaboration  
Arash Hajikhani, Arho Suominen (VTT Technical Research Centre of Finland, FIN) and Lukas Pukelis (Public Policy and Management Institute, LTU) |
Wednesday 24 November 2021

10h00-11h25  Plenary Session: The future of industrialization in a post pandemic world: Focus on developing countries

Chair: Nobuya Haraguchi  Chief, Research and Industrial Policy Advice Division (UNIDO)
Introduction of the topic, how is this session structured, introduce keynote speakers [5’].

• Opening remarks: Mr Hiroshi Kuniyoshi, Deputy to the Director General, UNIDO. “Fostering inclusive, sustainable and resilient industrial development through digital and green technologies” [5’]


• Keynote: Keun Lee, Seoul National University (KOR). “Digitalization and greening as windows of opportunity for leapfrogging in the post-pandemic world” [15’]

• Panel discussion (to bring a developing region perspective) by Alessandro Rainoldi (EC-JRC), Alejandro Lavopa (UNIDO) [20’ in total]

- Q&A [20’] - Chair to wrap-up and conclude [5’]

11:25-11:40  Comfort Break

11h40-12h30  Plenary Session: Inclusive and Sustainable Industrial Recovery through Digital Transformation: Focus on developing countries

Chair: Marco Kamiya, Chief, Digitalization and Innovation, UNIDO [5’].

• Keynote: Mr Bernardo Calzadilla-Sarmiento “UNIDO Strategic approach: Making the Fourth Industrial Revolution work for all” [pre-recorded message of 10’]

• Panel discussion on “digital and green transitions in the context of the Decade of Action of the SDGs” [20’ total]
  o Elfi Klumpp, Head of Partnership Development Global Education; Festo Didactic
  o So Young Kim, Director, Korea Policy Center for the Fourth Industrial Revolution (KPC4IR).
  o Rana Ghoneim, Chief, Energy Systems & Infrastructure Division, United Nations Industrial Development Organization (UNIDO)
  o Elizabeth Tuerk, Director, Economic Cooperation and Trade, UN Economic Commission for Europe (UNECE).

Q&A [10’] - Chair to wrap-up and conclude [5’]
**Parallel sessions C: The greening of the economy: challenges to achieve SDGs**

*Legend: names of people in bold are *chairs* or *speakers*

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<th><strong>C I</strong> 15h00 – 16h00</th>
<th><strong>C II</strong> 15h00 – 16h00</th>
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<tr>
<td><strong>Chair:</strong> Riccardo Savigliano <em>(UNIDO, AUT)</em></td>
<td><strong>Chair:</strong> Meryem Sghir <em>(UNIDO, AUT)</em></td>
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| Exploring European oil majors’ response to pressures for climate action  
*Leticia Canal Vieira, Matteo Mura, and Mariolina Longo*  (University of Bologna, ITA) | Countries’ research priorities in relation to the Sustainable Development Goals  
*Tommaso Ciarli* *(UNU-MERIT, NLD)*, *Hugo Confraria*  *(Universidade de Lisboa, PRT, and University of Sussex, GBR)*, *Ed Noyons* *(Leiden University, NLD)* |
| The potential of European Industry regarding Europe’s Green Deal  
*Norbert Malanowski* *(VDI Technologiezentrum GmbH, DEU)*, *Lesley Potters* *(EC-JRC, ESP)*, *Jana Steinbach* *(VDI Technology Center, DEU)*, *Els VandeVelde* *(IDEA Consult, BEL)* | Duration of universities as participants in the United Nations Global Compact programme  
*Martin Falk* *(University of South-East Norway, NOR)* and *Eva Hagsten* *(University of Iceland, ISL)* |
| Iberdrola Green Transformation  
*Beatriz Crisóstomo Merino* and *Cristina De Inza Pujadas* *(Iberdrola, ESP)* | Informal to Formal Industrial Co-Locatation and Structural Change in Ghana  
*Bernardo Caldarola* *(University of Sussex, GBR)* |
Thursday 25 November 2021

**Morning: 10h00 – 12h30**

**10:00-12:30 Plenary Session: RTOs in Industrial Innovation Ecosystems: Ensuring Europe’s Competitiveness & Sustainability**

**Introduction** by Antti Vasara, President, EARTO, and President and CEO, VTT [10’]

**Session part 1: Technology Infrastructures: Key enablers for the transition to a sustainable and digital industry – 10h10-11h25**

- Introduction by moderator Muriel Attané, Secretary General, EARTO [2’]
- Video on the role of Technology Infrastructures for Europe’s Prosperity & Sustainable Future, featuring Thomas Kallstenius, CEO, UST; João Claro, CEO, INESC TEC; Xavier Lopez, CEO, EURECAT; William Scanlon, CEO, Tyndall [3’]
- Keynote: “Towards an integrated European technology infrastructure landscape” by Anna Panagopoulou, Director “ERA and Innovation”, Research and Innovation Directorate-General, European Commission [10’ + 5’ Q&A]
- Presentation of JRC Policy Brief on Technology Infrastructures by Fabio Taucer, Deputy Head of Unit Scientific Development, JRC, European Commission [10’ + 5’ Q&A]
- Presentations of Technology Infrastructures’ Case Studies [5’/speaker + 10’ panel discussion]:
  - Monica Ringvik, CTO, RISE
  - Pierre Vedrine, Head of Accelerators, Cryogenics and Magnetism Department, CEA
  - Anne Van den Bosch, Director Public R&D Policies and Programs, Imec
  - Dmitri Petrovykh, Corporate Expert at INL
  - Andrzej Taube, Area Leader at Institute of Microelectronics and Photonics, Łukasiewicz Research Network
  - Esther Hurtós, R&I Policy and Funding Programmes, EURECAT
- Panel discussion and Q&A [10’]

**Session part 2: The role of RTOs to deliver impact on the economy and for society – 11h25-12h30**

- Introduction by moderator Sophie Viscido, Senior Advisor -Policy Strategy and Analysis, EARTO [3’]
- Presentation of OECD-EARTO Study by Philippe Larrue, Policy Analyst, OECD [15’ + 5’ Q&A]
- Presentations of RTOs’ Impact Assessment Studies [5’/speaker]:
  - Angélica López Sobrado, Technology Watch and Strategic Surveillance Manager, Tecnalia
  - Marcel de Heide, Senior Economist and Researcher Strategy and Policy, TNO
  - Torben Schubert, Deputy Head of the Competence Center Innovation and Knowledge Economy, Institute for Systems and Innovation Research ISI, Fraunhofer-Gesellschaft
  - Ingrid Lundestad, Head of Strategic Analysis, SINTEF
  - Kirsi-Maria Hyytinen, Senior Scientist, VTT Technical Research Centre of Finland
- Panel discussion and Q&A [12’]

**Closing address** by Antti Vasara, President, EARTO, and President and CEO, VTT [5’]
Thursday, 25 November 2021 – Afternoon: 15h00 – 17h00

15h00-17h00 Closing Plenary Session of the Conference

Chair & Moderator, Daria Tataj, Founder and CEO, Tataj Innovation; Strategic Advisor, European Institute of Public Administration [4’]

Closing Plenary – part 1: Summary Panel of Scientific results from plenary and parallel sessions [total 34’]
  Rapporteur of Day 1: Alexandr Hobza (EC-DG R&I and Scientific Committee member)
  Rapporteur of Day 2: Román Arjona (EC-DG GROW and Scientific Committee member)
  Rapporteur of Day 3: Fernando Santiago (UNIDO and Scientific Committee member)
  Rapporteur of Day 4-morning: Sophie Viscido (EARTO and Scientific Committee member).

Announcement of CONCORDi 2021’s Best scientific paper award winner [2’]

[The Moderator - Daria Tataj - highlights issues to be discuss in the policy panel, introduces policy panel members] [5’]

Comfort Break 15h45-16h00

Closing Plenary – part 2: Policy-makers’ round table [20’ in total, 5’ each]
  - Peter Dröll, Director, Prosperity - EC-DG R&I
  - Geraldine Mahieu, Acting Director, Investment, growth and structural reform - EC-DG ECFIN
  - Outi Slotboom, Director, Strategy and Economic Analysis - EC-DG GROW.

Reply / complementing statements by Xabier Goenaga (EC-JRC), Muriel Attané (EARTO), Antoine Dechezleprêtre (OECD) and Patrick Gilabert (UNIDO) [20’ in total]

Q&A [10’] - The Moderator - Daria Tataj - collects panellists’ key statements, collects comments from the audience, and adds her own statements.

Concluding remarks: Mikel Landabaso, Director, Growth and Innovation Directorate - EC-JRC [10’]

END of the Conference

Note: The dedicated webpage of CONCORDi 2021 is https://iri.jrc.ec.europa.eu/concordi-2021
Keynote speakers, Scientific Committee Members and Chairs of the Parallel Sessions CONCORDi 2021

Short BIOGRAPHIES

Keynote speakers

22 November 2021

Kevin O’Connor is a full Professor of Applied Microbiology and Biotechnology at University College Dublin, Ireland. His research interests are sustainable production and consumption, waste conversion to products of value, integrated biorefining, biobased chemicals, biodegradable polymers, biocatalysis and protein engineering. Professor O’Connor has published over 100 international peer review articles and made of over 200 contributions at national and international conferences. Professor O’Connor has filed 8 patents and successfully licensed 3 technologies resulting from his research work. Professor Kevin O’Connor is director of BiOrbic SFI bioeconomy research centre, headquartered at UCD. He is chairperson of the scientific committee for the €3.7 billion public private partnership Biobased Industries Joint Undertaking (BBI JU), and a member of the European Commission Mission board for Adaptation to climate change including societal transformation. Professor O’Connor is the founder of two spin out companies - Bioplastech a biotechnology company producing biodegradable polymers and Nova Mentis a biotechnology company producing hydroxytyrosol, a novel anti-oxidant.

Keynote speech: “Biodegradable plastics innovation for sustainability: an Entrepreneurial experience”

Reinhilde Veugelers is a full Professor at KULeuven (BEL) at the Department of Management, Strategy and Innovation. She is a Senior Fellow at Bruegel since 2009. She is also a CEPR Research Fellow, a member of the Royal Flemish Academy of Belgium for Sciences and of the Academia Europeana. From 2004-2008, she was on academic leave, as advisor at the European Commission (BEPA Bureau of European Policy Analysis). She served on the ERC Scientific Council from 2012-2018 and on the RISE Expert Group advising the commissioner for Research. She is a member of VARIO, the expert group advising the Flemish minister for Innovation. She is currently a member of the Board of Reviewing Editors of the journal Science and a co-PI on the Science of Science Funding Initiative at NBER. With her research concentrated in the fields of industrial organisation, international economics and strategy, innovation and science, she has authored numerous high-cited publications in leading international journals.

Keynote speech: “How to do green industrial policy?”
23 November 2021

**Dirk Pilat** is Deputy Director of the OECD Directorate for Science, Technology and Innovation. He helps oversee OECD’s work on science and technology, innovation, productivity and business dynamics, digital economy policy, consumer policy and industry policies.

Dirk joined the OECD in 1994 and has worked on many policy issues since then, including innovation, the role of digital technologies for economic growth, climate change and environmental innovation, labour markets, regulatory reform, global value chains, productivity and entrepreneurship, as well as health innovation. He also helps coordinate OECD’s work for the G20 and G7 on the Digital Economy. Before joining the OECD, Dirk was a researcher at the University of Groningen, where he also earned his PhD in Economics.

**Keynote speech:** “World Corporate Top R&D investors: Paving the way to climate neutrality”

24 November 2021

**Fiona Tregenna** Heads the DSI/NRF South African Research Chair in Industrial Development, and is a Professor of Economics at the University of Johannesburg. She holds a Ph.D. in Economics from the University of Cambridge. Her primary research focus is on issues of structural change, deindustrialisation and industrial development. Fiona is a part-time Member of the Competition Tribunal where she adjudicates competition (anti-trust) cases, and she has served on a number of boards, advisory panels and councils. These include the Presidential Economic Advisory Council, where she advises President Cyril Ramaphosa on economic policy. She is an elected member of the Academy of Science of South Africa (ASSAf), and has received various awards and major research grants.

**Keynote speech** “The impact of the COVID-19 pandemic on manufacturing firms in developing and emerging countries”

**Keun Lee** is Distinguished Professor of Seoul National University (economics), and the Vice-chairman of the National Economic Advisory Council for the President of Korea (& Chairman). He is a regular writer for the Project Syndicate. He is a Fellow of the CIFAR, and director of the Center for Economic Catch-up. He is the winner of the 2014 Schumpeter Prize for his monograph on Schumpeterian Analysis of Economic Catch-up (2013). He is also an editor of Research Policy. He served as the President of the International Schumpeter Society, a member of the Committee for Development Policy of UN, a GFC member of the World Economic Forum, and a consultant at the World Bank. He obtained Ph.D. in economics from the University of California, Berkeley.

**Keynote speech** “Digitalization and greening as windows of opportunity for leapfrogging in the post-pandemic world”
**Bernardo Calzadilla-Sarmiento** is Managing Director of the Directorate of Digitalization, Technology and Agri-Business, and Director of the Department of Digitalization, Technology and Innovation, at the United Nations Industrial Development Organization, UNIDO. Dr. Calzadilla has been Director for the Technical Assistance and Training at the International Organization for Standardization (ISO). As Director of the Department of Trade, Investment and Innovation, Dr. Calzadilla has been leading the work on quality and standards for trade facilitation, investment for sustainable development and innovation in the context of the fourth industrial revolution (4IR). Dr. Calzadilla has held position in investment promotion, funds mobilization and social responsibility. With more than 25 years of international experience in global development, his involvement includes working in Africa, Asia and Latin America. Dr. Calzadilla holds a Master’s and Ph.D. degrees in Economics from the Vienna University of Economics and Business (Austria).

**Keynote speech: “UNIDO Strategic approach: Making the Fourth Industrial Revolution work for all”**

25 November 2021

**Anna Panagopoulou** is Director of ‘European Research Area & Innovation’ at the Research and Innovation Directorate General of the European Commission. She is responsible together with her teams to co-create with Member States and stakeholders policies to shape a globally competitive European research and innovation system that is open, performant, cohesive and conducive to transformative innovation for a sustainable future. She has been working in the Commission in various policy and management roles for 24 years. She holds a master degree in electrical engineering and has a long professional experience in both private and public sector.

**Keynote speech: “Towards an integrated European technology infrastructure landscape”**
Scientific Committee Members and Chairs of the Parallel Sessions

Román Arjona is Chief Economist at the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs of the European Commission. He was Chief Economist and Head of Strategy and Foresight at the Directorate-General for Research & Innovation, and Vice-Chair of the OECD’s Committee for Science and Technology Policy (CSTP). He previously served in the Spanish government as Secretary-General for Science, Technology and Innovation, and before joining the Commission he was adviser to the Spanish State Secretary and the Spanish Minister for Science and Technology. Mr Arjona worked for the European Investment Bank and the International Monetary Fund as well as for the OECD as an economist. He is a former member of the World Economic Forum’s High-Level Advisory Group of the Europe Inclusive Growth and Competitiveness Lab, and of its Global Agenda Council on New Growth Models. Román graduated in Economics at the University of Valencia with a special distinction, and holds a Masters’ degree in European Economic Studies from the College of Europe in Bruges and a PhD in Economics from the European University Institute in Florence.

Pierre-Alexandre Balland is a French economist and one of Europe’s leading experts on complex systems, the future of cities, artificial intelligence and blockchain technologies. He is a Professor at Utrecht University and previously held positions at MIT and UCLA. He is a Visiting Professor at the Center for Collective Learning of the Artificial and Natural Intelligence Toulouse Institute and a research fellow at the Center for Complex Systems Studies. Pierre-Alex is also a high-level policy expert that currently serves in the ESIR group to advise the European Commission on innovation policy.

Chiara Criscuolo is Head of the Productivity, Innovation and Entrepreneurship Division in the Directorate for Science, Technology and Innovation at the OECD. Mainly, her work focuses on entrepreneurship, enterprise dynamics, productivity and policy evaluation. In this realm, she has coordinated large cross-country microdata projects on employment dynamics, productivity, as well as research and development. Chiara has played a lead role in advancing the use of firm level data and of microdata projects within the OECD. She has contributed to key horizontal and high-level projects and publications, including the OECD volumes “Future of Productivity”, “New sources of growth: Knowledge Based capital”, and the “OECD Innovation Strategy”. She co-manages the Global Forum on Productivity is also a member of the French and Portuguese National Productivity Boards. Ahead of joining the OECD, Chiara received her doctoral degree in Economics from University College London and held academic appointments at the University of Siena, City University and the University of Cambridge, in addition to the London School of Economics.

Alexandr Hobza is Chief Economist at the Directorate-General for Research & Innovation of the European Commission. He leads a team of economists and policy-makers that enhance the evidence base in support of science, technology and innovation policies of the European Commission. Previously, he headed teams working on assessments of structural reforms and was an advisor to the Director-General of DG ECFIN of the European Commission. Before joining the European Commission, he worked as a Research Fellow at the Centre for European Policy Studies in Brussels. He holds a PhD degree from the University of Economics in Prague, D.E.A. degree in quantitative economics from Université Libre de Bruxelles and M.A. degree in Economics of European Integration from an international programme delivered by University of Antwerp, Staffordshire University and University of Economics in Prague.
Bronwyn H. Hall is Professor of Economics Emerita at the University of California at Berkeley (USA), Visiting Professor at MPI-Munich (DE), and a Research Associate at the NBER and IFS-London (UK). She has published numerous articles on the economics and econometrics of technical change and innovation and is the editor of the Handbook of the Economics of Innovation in the Elsevier series. Her research includes comparative analysis of the U.S. and European patent systems, the use of patent citation data for the valuation of intangible (knowledge) assets, comparative firm level R&D investment and innovation studies, measuring the returns to R&D and innovation, and analysis of technology policies such as R&D subsidies and tax incentives. She has made substantial contributions to applied economic research via the creation of software for econometric estimation and of firm level datasets for the study of innovation, including the widely used NBER dataset for U.S. patents.

Elena Huergo is Director of the Group for Research in Productivity, Innovation and Competition (GRIPICO) and Full Professor of Economic Analysis at Universidad Complutense de Madrid. Her fields of interest are firm’s behavior, productivity and economics of innovation, with her most recent research concentrated in the impact assessment of public aid for R&D projects. From 2006-2010, she was advisor at the Centre for the Development of Industrial Technology, and from 2004-2013 she was member of the group for the development of a firms’ innovation panel data base, collected by the Spanish Statistical Office. She has published in journals such as International Journal of Industrial Organization, Research Policy, Oxford Review of Economic Policy, Small Business Economics, Industrial and Corporate Change, Journal of Technology Transfer, Journal of Small Business Management or Technological Forecasting and Social Change.

Pietro Moncada-Paternó-Castello is Senior Expert (an Adviser equivalent position of the Management and Advisory Staff job family) in Economics and Policy of Industrial Research & Innovation at the European Commission (EC), Joint Research Centre (JRC) – Directorate for Growth and Innovation (ESP). He holds a BSc in Agricultural Sciences (major in techno-economics) from the University of Catania (ITA), a MSc in Management of Technology from the Massachusetts Institute of Technology (USA) and a PhD in Economics and Management from the Université Libre de Bruxelles (BEL). Before joining JRC he worked, as Founder and President, in the Agency for Natural Resources Energy and Technology (ANETEC, BEL), in the MIT Energy Laboratory, Electric Utility Program (USA) and in the EC’s Directorate General for Research and Technological Development (BEL).

Andreas Pyka is Professor for Innovation Economics at the University of Hohenheim, Germany. His research interests include transformation processes towards a sustainable and climate neutral economy, the role of innovation for transformation and the application of new methodologies to overcome the limitations of mainstream economics in the analysis of long run developments. He is involved in several national and international research projects dealing with the impacts of the bioeconomy, artificial intelligence and robots, and mobility and energy change. His theoretical background is evolutionary and complexity economics. He graduated with a PhD in economics at the University of Augsburg where he also finished his habilitation in 2004. In the last years he was visiting professor at the TU Delft, at the Università degli studi dell’Insubria in Varese and the Université Paris 1 Panthéon-Sorbonne. He is editor-in-chief of the Journal of Innovation Economics and Management (Revue d’Economie et de Management de l’Innovation).
Gaétan de Rassenfosse is Professor in Economics of Innovation at the Ecole polytechnique fédérale de Lausanne, Switzerland. Prior to that, he was a research fellow at the University of Melbourne, Australia. The overarching objective of his research is to provide the policy environment that best addresses the needs of the knowledge economy. This objective is met by providing sound empirical evidence on research questions including, but not limited to, intellectual property issues, to the measurement of intangible capital, and to "science of science." His work appeared in international peer-reviewed scientific journals such as the Journal of Industrial Economics, the Journal of Law & Economics, the Strategic Entrepreneurship Journal, Research Policy, the Journal of Economics & Management Strategy, and the European Economic Review. His most recent project combines big data and artificial intelligence with the aim of building a database that links products to patents. The data are available at www.iproduct.io.

Grazia D. Santangelo is Professor of Strategic and International Management at Copenhagen Business School. She earned her PhD in Economics at the University of Reading (UK). Before joining Copenhagen Business School, she held a Jean Monnet Chair in International Business at the University of Catania (Italy). She researches across the fields of international business, global strategy, and innovation. Her research has been published in leading academic journals such as Journal of International Business Studies (JIBS), Journal of Economic Geography and Research Policy and has been recognized by a number of international awards. She is Reviewing Editor of JIBS and a member of the editorial review board of Academy of Management Review. She also served as associated editor of Journal of International Management and Industry and Innovation. Grazia is a Fellow of the European International Business Academy and elected member of the Executive Board of the Academy of Management International Management division.

Fernando Santiago is Industrial Policy Officer at the United Nations Industrial Development Organization (UNIDO) where he specializes in the provision of policy advisory services on industrial and innovation policy to Member States. He is also member of the team responsible to elaborate UNIDO’s flagship publication, the Industrial Development Report (IDR). Santiago serves as the UNIDO focal point for several UN Inter-Agency Task Forces and Teams, including the Inter-Agency Task Team on Science, Technology and Innovation for the Sustainable Development Goals (IATT). He is also a member of the scientific board of the Latin American Network for the Study of Learning Systems, Innovation and Competency Building (LALICS). His publications cover topics related to science, technology and innovation and development, and industrial policy in developing countries. Santiago is an economist from UNAM, Mexico and holds post-graduate degrees from SPRU-University of Sussex and UNU-MERIT/University of Maastricht.

Riccardo Savigliano serves at UNIDO as Chief of the Agro-Industries and Skills Development Division, within the Department of Agri-Business (AIS). The Division consists of 35 colleagues at HQ and around 400 experts in the field. The AIS portfolio is built on interventions related to industrial development, including sustainable resource management, impact assessment, skills development, agricultural mechanization, digitalization and creative industry, and several commodity value-chain programs. In his previous position as project manager, Riccardo implemented a large portfolio on environmental protection, under several global mechanisms and multilateral donors, mainly Global Environment Facility (GEF), Montreal Protocol and Climate and Clean Air Coalition (CCAC). Riccardo holds a PHD in Plant Pathology and Pest Management and conducted researches on economic impact of agro-
industries to local communities, including innovative models to identify and quantify externalities from agribusiness, land use and natural resource management.

Maria Savona is Professor of Economics of innovation at SPRU, Science Policy Research Unit at the University of Sussex, UK and of Applied Economics at the Department of Economics at LUISS University, Rome. She was previously at the University of Cambridge, UK, Universities of Strasbourg and Lille 1, France. Her research focuses on the effects of technical change and innovation on employment and wage inequality; innovation and industrial policy; barriers to innovation; the structural change of the sectoral composition of economies, particularly the emergence of global value chains in services. More recently, she works on the governance of data and policies to redistribute data-value. She has led and co-led several grants funded by the EC, ESRC, Joseph Rowntree Foundation, Greater London Authority, IDRC. She has advised the IADB; ECLAC; UN ESCAP; OECD; NESTA; BEIS, DETI. She is an Editor for Research Policy, Journal of Evolutionary Economics, Economia Politica, and a former member of the High Level Expert Group on the Impact of Digital Transformation on EU Labour Markets for the European Commission.

Meryem Sghir is an Industrial Development Officer with UNIDO’s Department of Agribusiness. She has over 10 years of professional experience in the field of technical cooperation, leading the conceptualization, formulation and implementation of technical cooperation projects in the area of agribusiness as well as strategies for sustainable agroindustry development. Ms. Sghir supports UNIDO’s Division of Sustainable Food Systems and Nutrition in the development of projects portfolio in relation to agro-value chain development, food security, job creation and environment sustainability in Africa, Asia and Latin America. Her work focuses on innovative thematics including the establishment of agro-industrial parks and climate change adaptation, mitigation, and biodiversity conservation for agro-industries, with the objective to achieve inclusive and sustainable industrial development. Ms. Meryem Sghir holds an Msc. in Food chain management from the Imperial College London and a Bs.c in Food Science, Economics and Marketing from the University of Reading.

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Before joining UNESCO, she worked for more than ten years at the OECD Directorate for Science Technology and Innovation as Senior Economist – Head of Unit. Her focus was mainly the changing determinants of growth and productivity; the economics of Intellectual Property Rights (IPR); knowledge-based capital; global value chains; the digital transformation and AI; job and skill dynamics; and the digital gender divide. Mariagrazia holds a Ph.D. in Economics from the University of Essex (UK) and has published extensively.

Martin Srholec is Researcher at the Economics Institute of the Czech Academy of Sciences since 2010 and at CERGE, Charles University since 2017. He has served as Deputy Director for Research of CERGE, Charles University, and the Economics Institute of the Czech Academy of Sciences since May 2018. He earned his PhD degree in Economics (2003) from the University of Economics in Prague, the Czech Republic, and in Science, Technology, and Innovation Studies (2005) from the University of Oslo, Norway. From 2002 to 2010, he was based at the TIK Centre, University of Oslo, Norway. He worked

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Sophie Viscido is Senior Advisor – Policy Strategy & Analysis at EARTO, the European Association representing over 350 Research and Technology Organisations (RTOs). She joined EARTO in 2015 where she is in charge of analysing and drafting strategic reports and recommendations on EU Research and Innovation policy and funding programmes. She coordinates the work of EARTO policy working groups gathering RTOs’ experts on Impact Assessment, Legal Affairs (incl. IPR, Open Science, State Aid), Financial Affairs (incl. Grant Agreement, Audits), and EU Funding Programmes and Policies (incl. Horizon Europe, Digital Europe, ERA). She also manages research and policy projects in collaboration with various stakeholders such as OECD, JRC, etc. Prior to working at EARTO, she covered European policy issues in the field of Transport and Mobility. She is a French national, graduated in EU Affairs and Public Policies at Sorbonne-Nouvelle University, and she has a master’s degree in European Economics from the Université Libre de Bruxelles.

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