



UNESCO Chair in Technologies for Development 2016 INTERNATIONAL CONFERENCE

FROM INNOVATION TO SOCIAL IMPACT

2-4 MAY 2016
EPFL, LAUSANNE, SWITZERLAND

<http://cooperation.epfl.ch/2016Tech4Dev>

CALL FOR BREAKOUT SESSIONS
Deadline: 11 September 2015

CALL FOR EVENTS
Deadline: 11 September 2015

2016 International Conference

UNESCO Chair in Technologies for Development: From Innovation to Social Impact

2-4 May 2016 | EPFL, Lausanne, Switzerland

The UNESCO Chair in Technologies for Development hosted by the Cooperation & Development Center (CODEV) at the Ecole Polytechnique Fédérale de Lausanne (EPFL) in Switzerland is pleased to announce that the **4th International Conference on Technologies for Development (Tech4Dev 2016)** will take place from 2-4 May 2016 at the SwissTech Convention Center in Lausanne, Switzerland.

The Conference in a Nutshell

The Tech4Dev Conference is the biennial flagship event of the UNESCO Chair in Technologies for Development hosted by CODEV at EPFL. The focus of the Conference is the application of technology solutions to advance inclusive social and economic development in the Global South.

Tech4Dev provides an opportunity to:

- Network across disciplines and fields of technology, to promote the development, deployment, adaptation, and scaling of new solutions for the Global South.
- Reinforce collaboration among diverse stakeholders - academics, engineers, entrepreneurs, policymakers, practitioners, and social scientists - for a holistic approach to addressing challenges in technology innovation and diffusion for development.
- Build capacity among students and young professionals to engage in multidisciplinary problem-solving for social impact.

Core Thematic Areas

- Technologies for **Humanitarian Action**
- **Medical Technologies**
- Science and Technology for **Disaster Risk Reduction**
- Technologies for **Sustainable Access to Energy**
- **ICT for Development**
- Technologies for **Sustainable Habitat and Cities**

Papers accepted to be presented at the Conference will either be selected for submission to the *Journal of Development Engineering* (Elsevier) or will be published as electronic proceedings on the conference website.

Why Attend Tech4Dev 2016?

A unique **multidisciplinary** platform

Showcase for **cutting-edge research** projects in Tech4Dev and **case studies** from the field

Participation by **400 experts** from over **60 countries**



2014 UNESCO Conference

Rationale for Tech4Dev 2016

Innovation

Technological innovation is vital to address global challenges such as climate change, pollution, disease, rising inequalities, and chronic poverty. We need renewable energy sources, efficient transport networks, effective public health systems, well-designed infrastructure, improved agricultural systems, and access to quality education for everyone.

Technological Leapfrogging

Developing and emerging countries can take advantage of technological leapfrogging in key domains such as health, energy, education, and urban development. Moreover, the Global South is expected to play an increasingly important role in technological innovation, and many solutions developed in developing and emerging countries will influence offerings in the Global North. Innovation models such as living labs, open source, and open innovation will continue to support the emergence of global innovation networks and accelerate the development of innovative and cost-effective solutions.

Technologies for Humanitarian Action

The increasing complexity and number of protracted crises has led humanitarian actors to broaden their operations to address the longer-term effects of war in addition to providing short-term, emergency aid to individuals. Against this backdrop, and with the boundaries between humanitarian action and development becoming increasingly blurred, the Tech4Dev 2016 Conference will highlight innovative technologies that are currently being used to address humanitarian challenges.

Discussion Platform

In order to accelerate innovation and maximize its positive social impact, stakeholders from different disciplines need a platform to exchange and discuss their ideas and experiences. The Tech4Dev Conference provides a critical platform for knowledge exchange, enabling researchers to present their findings and practitioners to outline their needs and insights, while relating their experiences from the field. At Tech4Dev, social entrepreneurs, industry, and policy makers can deepen their knowledge, learn about cutting-edge research and projects, and brainstorm together about new approaches to technology innovation and dissemination for development.

Submissions should emphasize the value of technological innovation while also acknowledging the limits of technology in generating inclusive social and economic development. We welcome, in particular, proposals to organize sessions with creative formats and innovative approaches to generating discussion.



2014 UNESCO Conference

Tech4Dev 2016 Core Thematic Areas

1. Technologies for Humanitarian Action

Topics of interest include, but are not limited to:

- ✓ Innovative approaches to ensure meaningful humanitarian action in the face of limited access (e.g., telemedicine, use of remote sensing, tracking devices)
- ✓ Technologies for essential urban services affected by humanitarian crises (e.g., health, electricity, shelter, water treatment)
- ✓ Beneficiary engagement in a hyper-connected world
- ✓ Ethics and principles for humanitarian engineering
- ✓ Performance and impact evaluation of technological innovations
- ✓ The significance of technology for education in humanitarian contexts

2. Medical Technologies

Topics of interest include, but are not limited to:

- ✓ Innovative medical technologies for low- and middle-income countries (e.g., m-health, phone based diagnostic kits, 3D printing of medical equipment)
- ✓ Technology transfer and involvement of local stakeholders
- ✓ Innovative business models for sustainable development and upscaling
- ✓ Standards, norms, and regulations affecting access to medical technologies
- ✓ Medical product cost and lifecycle analyses and innovative improvements
- ✓ Social impact assessment and field experiments

3. Science and Technology for Disaster Risk Reduction

Topics of interest include, but are not limited to:

- ✓ Technologies to assess disaster risks, vulnerabilities, and exposure to hazards (e.g., early warning systems, modeling, mapping)
- ✓ Tools and approaches to reduce damage to critical infrastructure and disruption of basic services
- ✓ Utilization of media, including social media, traditional media, big data, and mobile phone network
- ✓ Promotion of cooperation between academic, scientific and research entities, and the private sector to help reduce disaster risk
- ✓ Eco-engineering
- ✓ Using technologies in the aftermath of disasters (e.g., robot technologies and drones)

4. Technologies for Sustainable Access to Energy

Topics of interest include, but are not limited to:

- ✓ Renewable energy sources, energy storage and power management technologies (e.g., smart grids in the Global South)
- ✓ Enhancing energy quality and efficiency to increase productive use of energy
- ✓ Feasible, sustainable, cost-effective provision of energy
- ✓ Resilient energy infrastructure, for instance the provision of a safe, reliable power supply for healthcare
- ✓ What are the respective roles of the public and private sector in both financing and enhancing energy access, particularly for the poorest?

5. Information and Communication Technologies for Development (ICT4D)

Topics of interest include, but are not limited to:

- ✓ ICT for agriculture (e.g., agricultural technologies, irrigation, farming practices)
- ✓ Connectivity and communication (e.g., information networks, information technologies and systems, social media)
- ✓ Potential uses of ICT to raise awareness and disseminate information
- ✓ Innovation and technology enhancing field communications
- ✓ Overcome obstacles of technology transfer (key factors for successful scaling)

6. Technologies for Sustainable Development of Habitat and Cities

Topics of interest include, but are not limited to:

- ✓ Urban risk and vulnerability
- ✓ Technological innovation as both the cause and effect of urban development
- ✓ Adaptive urban design: Smart cities (e.g., case studies, business models, and innovative applications)
- ✓ Intelligent transport systems and traffic management
- ✓ Smart sensor-based networks and applications
- ✓ Capacity building of local government practitioners: Social inclusion and mobility
- ✓ Water and sanitation (e.g., water purification, solid waste management, vector control, drainage)

⇒ Additional Cross-Cutting Issues (applicable to the Six Core Thematic Areas)

- ✓ Gender and technology in development
- ✓ Open source approach to technology for development
- ✓ Experiences from living-labs, hackathons, and hands on models for engagement
- ✓ The internet of things (IoT) for development
- ✓ Lessons in scaling businesses by technology for development entrepreneurs
- ✓ Public-private partnerships to advance technology for development

IMPORTANT NOTE

Please note that there is a certain level of overlap between the six thematic core areas. Proposals for sessions, events, and papers can potentially be submitted under several core areas. Please choose the core area closest to your field. The Conference Organizers might regroup sessions, events, and papers during the evaluation process.

Core Thematic Areas							
Cross-Cutting Issues							
	[HumTech]	[MedTech]	[DRR]	[Energy]	[ICT4D]	[Habitat]	
	Technologies for Humanitarian Action	Medical Technologies	Science and Technology for Disaster Risk Reduction	Technologies for Sustainable Access to Energy	Information & Communication Technologies for Development	Technologies for Sustainable Habitat and Cities	
			Gender and Technology in Development				
		Open Source Approach to Technology for Development					
		Experiences from Living-Labs, Hackathons, and Hands on Models for Engagement					
			The Internet of Things (IoT) for Development				
			Lessons in Scaling Businesses by Technology for Development Entrepreneurs				
			Public-Private Partnerships to Advance Technology for Development				

2016 International Conference

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2-4 May 2016 | EPFL, Lausanne, Switzerland

Call for Sessions and Events: 11 September 2015

<http://cooperation.epfl.ch/2014Tech4Dev>

The UNESCO Chair invites interested parties from research, industry, or civil society to submit either proposals for breakout sessions or events (e.g., hackathons, workshops, be creative ...) under one of the six thematic core areas of the conference.

Breakout session or event proposals will need to provide a clear overview of the proposed session or event under the headings outlined in the prescribed template:

- Title of breakout session or event proposal
- Short description, alignment with conference themes, objectives and expected outcomes
- Summary of discussion/focus and target audience
- Planned program for event proposals

Selection Criteria

The following criteria will guide the selection process of either a breakout session or an event proposal:

- **Development focus:** The integration of technology with poverty reduction, sustainable development, gender equality, integrity, and ethics.
- **New thinking, findings, or approaches:** The integration of current debates with new ideas and solutions, including lessons from failure.
- **Innovation:** How novel or innovative is the proposal, and how does it advance existing knowledge?

Costs

The Conference Organizers will cover the following expenses of the selected Session or Event Organizers (if applicable):

- Waiver of the conference registration fee.
- Accommodation from Sunday 1 May to Thursday 5 May 2016 with breakfast included (max. 4 nights booked and paid directly by the Conference Organizers).

The selected Session or Event Organizer will be responsible for their own travel costs.

Breakout Sessions

Each breakout session spans over 1.5 hours (90 minutes) in duration (4-6 paper presenters per session [max. 10 minute presentation per speaker]), complemented by Q&A and audience interventions.

The breakout sessions are at the core of the conference and are intended to be an opportunity for participants to play a role in generating new knowledge. The Session Leader will report back to the Plenary Moderator, participate in the Plenary Session and present the main results of the breakout session and participates in the discussions. The selected Session Leaders will be part of the *Scientific Committee of the 2016 UNESCO Technologies for Development Conference*. As a Member of the Scientific Committee the Session Leader will collaborate closely with the Conference Organizers regarding the review process to select the papers that will be presented as well as contribute to the overall organization of the conference. Please note that Session Leaders do not present a paper of their own.

The Session Leaders are **responsible for**:

1. Disseminating the Call for Extended Abstracts in their own networks.
2. Reviewing, providing feedback, and selecting the session papers.
3. Informing the paper applicants about the acceptance or the (justified) rejection of their proposal.
4. Distributing the accepted papers of all the presenters within the session.
5. Reminding the presenters about the maximum length of their presentation (10 minutes) and encouraging them to read each other's papers in advance of the session.
6. Reminding the presenters to submit their PowerPoint presentations online in advance of the conference and provide feedback to ensure high quality conference presentations.
7. Chairing the Session, including a short introduction on the main goal of the session, a short introduction of each of the presenters, managing the time schedule, leading the discussion, rounding up, then reporting back and participating in the plenary session.
8. Providing potential support for the elaboration of the post-conference publication.

Proposals for Breakout Sessions should be submitted **by 11 September 2015**, using the **prescribed template**. Acceptance decisions will be made **by 28 September 2015**. An open Call for Extended Abstracts will be issued **by 5 October 2015**, with online submission by **6 November 2016**. The deadline for full paper submission is **15 January 2016**.

Key Dates [Breakout Sessions]

Session proposals submission closes	11 Sep 2015
Decision to Session Leaders of proposal acceptance	28 Sep 2015
Open call for extended abstracts launched (incl. poster presentations)	5 Oct 2015
Extended abstract submission closes	6 Nov 2015
<i>Review by Scientific Committee of extended abstracts</i>	<i>6 Nov-30 Nov 2015</i>
Author notification – full paper submission and poster presentations	7 Dec 2015
Full paper submission	15 Jan 2016
<i>Review by Scientific Committee of full papers</i>	<i>15 Jan-1 Feb 2016</i>
Final author notification of full paper (or poster) acceptance	8 Feb 2016
Final camera-ready paper submitted	22 Feb 2016
Discounted registration (Early Bird) for speakers, etc. closes	14 Mar 2016
PowerPoint presentations submitted online	11 Apr 2016
Tech4Dev 2016 in Lausanne	2-4 May 2016

Event Proposals

By hosting an event, you will have the opportunity to engage a wide range of stakeholders in discussions and debate around your topic that falls under one of the [six thematic core areas](#) of the conference. Tech4Dev 2016 encourages collaboration with other organizations in order to build partnerships and to bring a diversity of perspectives to the conference.

The content, format, and program for an event proposal is entirely the responsibility of the event organizers, including recruiting presenters. As an Event Organizer you will be guided through the planning process by the Conference Organizers. However, all event speakers and attendees must register for the conference and any additional expenses are the responsibility of the Event Organizer. Meeting rooms and audio/visual equipment will be provided by the Conference Organizers. The duration of an event spans over 1.5 hours (90 minutes). The Event Organizer will need to report back to the Plenary Moderator, participate in the Plenary Session and present the main results of the event.

In order to ensure a diverse and dynamic program for Tech4Dev 2016 in terms of topics, geographic regions, and formats, the Conference Organizers might propose a merger between similar or complementary event proposals.

Event proposals should be submitted online **by 11 September 2015**, using the [prescribed template](#). Acceptance decisions will be made **by 28 September 2015**. Event Organizers will need to submit the finalized program (including presenters/speakers) to the Conference Organizers **by 15 January 2016**.

Key Dates [Event Proposals]

Event proposals submission closes	11 Sep 2015
Notification of event proposal acceptance	28 Sep 2015
Submission of finalized event program to conference organizers	15 Jan 2016
Discounted registration (Early Bird) for speakers, etc. closes	14 Mar 2016
Tech4Dev 2016 in Lausanne	2-4 May 2016

Breakout Session or Event Proposal Submission Template

Name:

Title:

Affiliation:

Telephone Number:

Email:

Address:

Brief Bio (max. 80 words) of Session Leader or Event Organizer:

Submission Type:

☐ Breakout Session

☐ Event Proposal

Core Thematic Areas:

☐ HumTech

☐ DRR

☐ ICT4D

☐ MedTech

☐ Energy

☐ Habitat

Title of breakout session or event proposal (max. 10 words)

Abstract

Short description, including alignment with conference themes and objectives (max. 200 words – text will be used in promotional material)

Description

Proposed discussion focus (max. 200 words)

Objectives

Justification and expected impact during and after the conference (max. 200 words)

Target Audience

Define target audience (max. 50 words)

Proposed Program (Applicable only for Event Proposals)

Proposed agenda, format, name and affiliation and email address of potential speakers

IMPORTANT: The Session or Event Proposal Form should be submitted online as a word document [.doc or docx].

File name format should be SESSION_Tech4Dev2016_Last Name First Name (e.g., SESSION_Tech4Dev2016_Smith John) or
EVENT_Tech4Dev2016_LastName First Name (e.g., EVENT_Tech4Dev2016_Smith John)