ICT4S is the premier international conference aiming at bringing together leading researchers in *Information and Communications Technology (ICT) for Sustainability* with government, industry and community representatives, including decision-makers and end-users with an interest in using ICT for sustainability, researchers focusing on ICT effects on sustainability and developers of sustainable ICT systems or applications. ICT4S is devoted to cover all types of research, developments and applications of ICT to support sustainability and the topic is receiving significant attention across the world. However, there are still numerous problems to be addressed that require collaborative research across multiple disciplines.

To provide a broader forum for reporting on scientific progress as well as practical experiences on ICT for sustainability, **ICT4S 2020** invites submissions (*Research Paper track*) that range from well-founded technical papers, to exploratory, empirical and application papers. Papers recently published in related journals (*Journal-first Paper track*) and poster submissions (*Poster track*) are also welcome. Details of the different tracks are below:

Research Paper Track

We welcome original papers reporting on research, development, case studies, and experience and empirical reports in the field of ICT4S. The following type of papers are possible:

- **Technical Papers** describing original scientifically rigorous solutions to significant sustainability development problems. A technical paper should clearly describe the problem addressed, the relevant state of the art, the scientifically-founded solution, and the impact and benefits of the contribution. Appropriate examples, synthetic or otherwise, should be used to explain all aspects of the contribution.
- **Exploratory papers** describe new, non-conventional ICT for sustainability development research positions or approaches. These papers should challenge the status-quo and describe vision solutions based on new ways of using ICT for the development of sustainable systems, tools, methods and environments. They must clearly describe the inadequacies in the current state-of-the-art and rigorously present their approach, clearly demonstrating and discussing its pertinence, correctness and significance.
- **Application papers** provide a realistic and verifiable picture of the current state-of-the-practice in ICT for sustainability and explore the problems encountered by the industrial, community, or other adoption of sustainability techniques. Contributions should describe and analyze the application of ICT for sustainability techniques to industrial problems, preferably identifying challenges, shortcomings, innovative solutions, and concepts arising from the practical deployment of tools and techniques.
- **Empirical Evaluation Papers** evaluating existing problem cases or scientifically validating proposed solutions through, for example, empirical studies, experiments, case studies, or simulations. The topic of the evaluation presented in the paper must be clearly stated and motivated. The research method must be sound and appropriate. The results must highlight the advances found, but also the current gaps and challenges.

Journal-first Paper Track

Authors of recently published journal papers are invited to present their work at ICT4S. Journal First papers should relate to ICT4S and describe original results that have not been presented at a conference. Papers that are extensions of previous conference papers, or which are minor enhancements or variants of the results presented in the prior work are not eligible. For a journal paper to be eligible to participate, the paper must be: in scope of the conference (see the conference topics), accepted in one of the following journals (if you would like us to consider a paper published in another journal of equal reputation to those presented in the list, please contact the Program Chairs), and accepted for publication after January 1st, 2019 and before December 31st, 2019.

List of considered journals: T-SUSC, SUSCOM, Technol. Forecast. Soc. Change, Solutions, JSS, IST, GMD, JSDTL, Telematics and Informatics, STS, FGCS, EIA Review, IEEE Series on Green Communications and Computing Networks, INFOGG, Journal of Cleaner Production, JSME, Renewable and Sustainable Energy Reviews, Applied Energy, Energy Policy, TSE, TOSEM, Environ. Model. Softw., IEEE Software, IEEE Computer, CACM, SoSyM, ASE, JOT, IJSEKE, IJCTT, IJSE, CSRD, JIIS.

Poster Track

We invite high-quality **2-pages extended abstracts** for posters. Posters may present late-breaking research or work in progress. A poster can help attract interest and give a rapid overview of your research. The extended abstract should also include a section clearly stating how the work is to be presented at the conference, emphasizing interaction potential, and explaining how an engaging participant experience will be achieved.

Topics of interest

ICT4S'20 seeks submissions to one of the proposed tracks (research paper, journal-first paper or poster) on diverse topics related to ICT for sustainability, including, but not limited to:

- Sustainable community building via ICT
- Grassroots movements facilitated by ICT
- Secondary and tertiary societal effects of ICT, including rebound and induction effects
- ICT & economic growth, post-growth, Decoupling
- Potential of ICT for economic decentralization
- ICT potential for peer-to-peer sharing
- ICT and transparency in production chains
- Green E-Commerce, sustainable online-shopping
- Digital Sufficiency / Digital Sobriety
- ICT and social acceleration
- ICT and circular economy / circular society
- Sustainability-driven resilience by and of ICT
- Social sustainability implications, contributions and limitations of ICT
- Enabling and systemic effects of ICT on society and/or the environment
- Intelligent energy management in buildings
- Smart cyber-physical systems (grids, city, home, farming)
- Sustainability in data centers and high-performance computing
- Intelligent transportation and logistics
- Green networking, monitoring and adaptation of software-intensive systems and services
- ICT-induced behavioral and societal change
- Design principles for sustainable ICT
- Energy-efficient and energy-aware software engineering
- Sustainability of technical infrastructures
- Software for environmental sustainable ICT
- Software for sustainable business governance
- Reduced hardware obsolescence
- E-waste and closed material cycles
- Incentives and nudges for more sustainable ICT
- Tools supporting green decision making and development
- Challenges for an environmentally sustainable ICT industry
- Art and education in ICT for sustainability
- Systematic interdisciplinary efforts in ICT for sustainability
- Computational sustainability
- Climate informatics
- Languages, simulation tools and methods, and cloud computing for environmental sciences
- Modeling tools and methods for sustainability-aware (cyber-physical) system development
- Elicitation, specification, and validation of sustainability requirements

Evaluation Process and Selection Criteria

All submitted papers will be reviewed by at least three members of the program committee. Papers will be evaluated (in accordance with their type) based on their *novelty*, *significance*, *correctness*, *soundness*, *reproducibility*, *evaluation*, quality of presentation and appropriate comparison to *related work*, and general *presentation* of the overall contribution. Since the ICT4S conference is also a place where researchers and practitioners can exchange personal perspectives on values and impact, particular attention will be also given to the explicit description and the significance of how the work has or would positively *impact* any aspect of sustainability of the environment, society or economy.

Submission Process

Papers should be submitted electronically via Easychair at https://www.easychair.org/conferences/?conf=ict4s2020.

- **Research paper:** select the "Research Paper" track and submit your abstract prior to the full paper by the deadline stated, to allow their allocation to reviewers. Each paper must conform to the ACM format (Word template and LaTeX class file) and is **limited to 10 pages** including text, appendices, figures and references. Papers that are too long or violate the ACM formatting instructions will be automatically rejected. All submissions must be original, unpublished, and not submitted simultaneously for publication elsewhere. Accepted papers will be published in the conference proceedings by ACM digital library, and authors will be allocated a slot during the conference to present their work.
- **Journal-first paper:** select the "Journal First Paper" track and submit your published journal paper together with a cover letter describing the reasons why it should be presented at ICT4S'20. Authors of the accepted journal-first papers will be allocated a slot during the conference to present their work.
- **Poster:** select the "Poster" track and submit your extended abstract, including a description of how the work is to be presented at the conference. Submissions must conform to the ACM format (Word template and LaTeX class file) and is **limited to 2 pages**.

Important Dates

- January 29th, 2020: Abstract submission (only for the research paper track)
- February 05th, 2020: Paper and poster submission (research paper, journal-first paper and poster tracks)
- March 06th, 2020: Review process ends
- March 12th, 2020: Discussion process ends
- March 13th, 2020: Author notification
- June 21-27, 2020: Conference